HELSINKI SCHOOL OF ECONOMICS (HSE)
Department of International Business

Failures of Finnish Born Global Companies

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and

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Abstract

The aim of this study is to identify the most fatal strategy mistakes done in the case companies before they went bankrupt. The research problem was defined as: "What are the underlying micro level reasons behind born global bankruptcies?" This research problem was further divided into three research questions: 1) What are the strategy reasons in a born global bankruptcy? 2) Can the companies be divided in groups of similar behaviour? 3) How are the reasons compatible with the POM$ICA-model used in previous born global studies?

The research method was based on extensive background survey of archives of the National Board of Patents and Registration (NBPR), press survey and the selected eleven interviews of nine selected case companies. Screening the archives resulted in a group of companies that were more deeply researched by a press survey and, finally in-depth interviews. From those case reports the study formed three cross-case analyses, which yield the results. Information sources were financial statements, certificates of incorporation, press articles in leading Finnish business magazines, academic literature, interviews, informal discussions with venture capitalists, a company memoir, and a movie.

The results of the study reveal answers to research questions. The reasons for bankruptcy are: unclear focus, incompatibility with market elements, technological tribulations, strategic rigidity and breached financer relations. There are three different types of bankruptcies in born global industries: 1) product failures, 2) market failures and 3) partner failures. The results were compatible with the POM$ICA model, which made it possible to analyze strategies further and suggest implementations for strategy formation.

Keywords:
Born Global, Strategy, Bankruptcy, International Business

Tiivistelmä

Tutkimuksen tarkoituksena oli tunnistaa kohtalokkaimmat strategiavirheet konkurssiin menneissä kohdeyrityksissä. Tutkimusongelma oli: Mitkä ovat piilevät mikrotason syyt born global-yritysten konkursseissa. Tämä tutkimusongelma jaettiin kolmeen tutkimuskysymykseen, jotka olivat: 1) Mitkä ovat strategiasyyt born global konkurssissa? 2) Voidaanko yrityksiä jakaa ryhmiin niiden samankaltaisen käyttäytymisen perusteella? ja 3) Ovatko tutkimustulokset sovitettavissa nk. POM$ICA-mallin kanssa?

Tutkimusmenetelmä perustui laajaan selvitykseen Patentti- ja rekisterihallituksen arkistoissa (PRH), lehdistökatsaukseen ja haastatteluihin. Arkistoseulonta mahdollisti yritysten tunnistamisen. Näitä yrityksiä tutkittiin tarkemmin lehdistökatsauksella. Viimeisen tarkennuksen analyysiin antoi haastattelut. Tutkimuksen lähteet ovat tilinpäätökset, yhtiöjärjestykset, suomalaisten johtavien talouslehtien artikkeliseulonta, akateeminen kirjallisuus, haastattelut, epämuodolliset keskustelut suomalaisten pääomasijoittajien kanssa, yritysmuistelma ja elokuva.

Tutkimus antoi vastaukset kaikkiin tutkimuskysymyksiin. Syyt konkursseihin olivat heikko fokus, markkinaelementtien yhteensopimattomuus, teknologiset haasteet, strateginen jäykkyys ja heikentyneet sijoittajasuhteet. Tutkimus tunnisti kolme ryhmää born global konkursseja. Nämä olivat 1) Tuote-epäonnistumiset, 2) Markkinaepäonnistumiset ja 3) Partneriepäonnistumiset. Tulokset olivat yhteen sovitettavia POM$ICA-mallin mukaan. Tämä teki tulosten vertailun ja strategian muodostukseen liittyvän kehityksen mahdolliseksi.

Avainsanoja:
Born global, strategia, konkurssi, kansainvälinen liiketoiminta

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1 Introduction

In recent years there have been many high profile bankruptcies in the so-called born global cluster. During the time horizon from year 1995 to 2002 the establishment of born globals increased. However, the bankruptcies of this study's companies occurred after the burst of hype in March 2000. In spite of obvious reasons for bankruptcies in the rough financial climate, the study will take the microlevel approach to bankruptcies, i.e. identifying failures in strategies and in management processes. A more recent study admits that born globals are facing tremendous entrepreneurial and managerial challenges related to instant or rapid globalization (Luostarinen & Gabrielsson 2004).

Several FIBO-researchers have studied the born global strategies (Teimonen (2001), Rasilainen (2002), Rinkinen (2000), Konttinen (2001), Junkkari (2002) etc.); however, weaknesses are not fully covered by any study. Some famous Finnish researchers like Professor Prihti (1975), or Dr. Erkki Laitinen (1992, 1994) have studied bankruptcies but they focus on predictions of bankruptcies based on financial statement analysis. The same implies for literature in finance. Dr. Cochrane introduces several calculations to illustrate a theoretical background for financial decision-making. Failures are seen as 'walking dead' and that is only the case when the investor didn't make a satisfied exit from the company in question. These studies don't give a satisfying explanation for strategy mistakes made in those companies.

The aim of this study is to identify the most fatal strategy mistakes done in case companies before they were bankrupted. The most interesting findings were the fatal five faults of these companies: 1) unclear focus, 2) incompatibility of market elements, 3) technological tribulations, 4) strategic rigidity, and 5) breached financer relations. Three different categories of failing companies were also identified: focus failures, market failures and partner failures.

The paper is structured in three parts: theory and background, presentation of the research, and findings. First part includes the introduction chapter 1, which includes limitations, terms, and contribution. The theories are introduced in chapter 2. Chapter 3 briefly introduces the macro- and mesolevels of the bankrupted born globals according to first part of the research. Chapter 4 will go deeper in the methodology and introduce the reasoning behind interview questions. The second part is divided in two. Chapter 5 will draw the event horizon of each individual case company. The third and last part will draw broad conclusions and generalize the findings in chapter 6. In the final chapter there will be also recommendations for future research and also limitations to implementations of the research.

1.1 Background

This research is part of the Born Global project at Helsinki School of Economics (HSE) and the Center of International Business Research (CIBR). This thesis is done under the supervision of Professor Reijo Luostarinen and Professor Mika Gabrielsson. This project was initially launched in 1999 and the research is still going on. The first studies in this field were made in order to understand different internationalisation patterns of young enterprises compared to the traditional pattern. This study concentrates on understanding the failures of those companies. Another closely related topic under research is the financing of born globals.

This research is conducted in two parts. The first part was the survey of bankrupted firms from year 1995 to 2002. The purpose of this first part of research was to identify bankrupted born globals and to find macro- and mesoeconomic reasons behind the bankruptcies. The first part of study was made by using statistics as a tool for the quantitative analysis. The second part of the study is to find the micro economic reasons behind these bankruptcies, i.e. strategic mistakes or unfortunate coincidences for a single firm. From these single events the study tries to draw conclusions about the most common reasons for failures.

1.2 Topic

When making a research about strategies, the failures are often neglected. It is human to want to seek the best possible cases and the interviewees are definitely more eager to tell about their success stories. However, failures tell us more. If entrepreneurs knew the most common reasons behind failures they could learn to avoid them. Therefore, studying failures of companies would give us valuable information in the strategic planning of these companies.

Born globals are a new phenomenon and haven't been studied a lot so far. These companies differ greatly from common SMEs by their strategies and behaviour. These companies are set up fast and, if not immediately, then soon after they are globalized. This causes challenges for the company and the people that are responsible for developing the company. One common feature behind born globals is that they carry more risks than ordinary SMEs. But at the same time they carry a promise of high growth when penetrating to global markets. These risks are the core of the research.

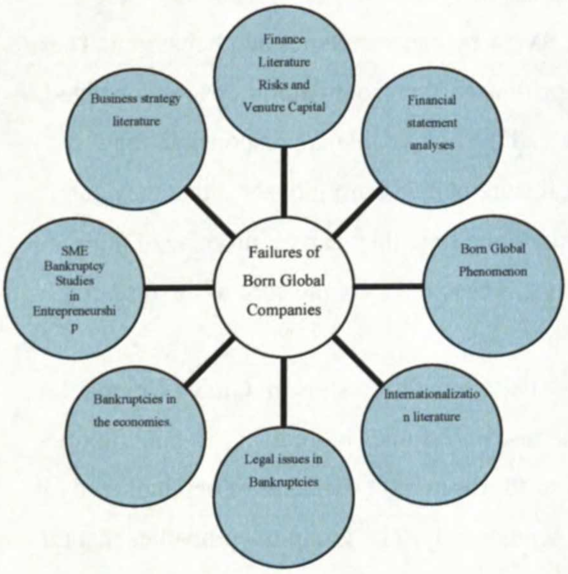
The header suggested for the research is 'Failures of Finnish Born Global Companies'. It covers the whole area of research. The research studies more than just bankruptcies and therefore 'failures' is the proper word for discussion. Because of depth of study it has to limit the research for Finnish companies only. The group of companies that the paper researched is born globals.

1.3 Contribution

As discussed above there hasn't been much research about failures in the international business faculty. However, other faculties have done extensive research over bankruptcies and it should be utilized. Some studies are conducted in the faculty of entrepreneurship regarding SME bankruptcies. Studies are also made in the faculty Finance about failures of companies that have received venture capital. Moreover, in economics and accounting researches have been made in order to find out probabilities of failures when either the key figures of the companies change or something happens in the entire economy. When talking about strategies there also has to be studies made about the weaknesses of companies.

And yet these studies still don't take small rapidly globalizing companies into account or even discuss about micro level reasons behind these failures. Therefore, there is a research gap to be filled. On the other hand the study has to utilize the information already available and combine these different views into useful framework for understanding failures as a whole. The research gap is illustrated in a picture below.

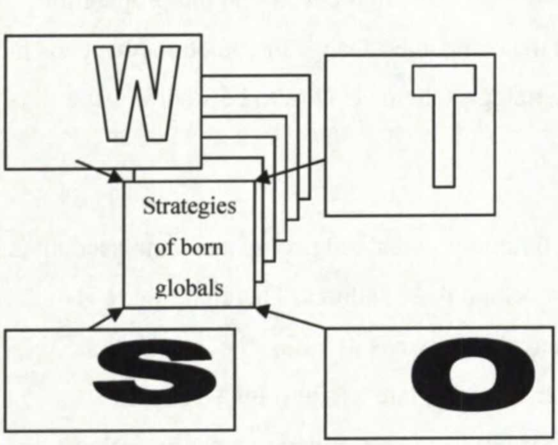
Chart 1 Gap in Bankruptcy Research



This chart shows that the study of born global failures would combine different approaches to the study of companies and more specifically their bankruptcies. That area is not yet explored.

In addition to the value of a new point of view in bankruptcy/failure research this study would also give valuable information for the strategy development of born global companies. This effect becomes visible trough the identification of fatal weaknesses of these companies and it could be used as strategy tool when forming a SWOT analysis for born globals. If born global entrepreneurs knew the most crucial weaknesses for their venture they would most likely pay more attention to these points in their strategy. That could give them an edge when making their SWOT development more efficient and useful for strategy purposes. See chart below.

Chart 2 Gap in Born Global Strategy Research



This chart illustrates that there have already been many studies about born global strategies. The value of this study for strategy planning purposes is to bring accuracy for the weakness analyses. The five boxes below header box 'strategies of born globals' exemplify the strategy researches already done in the faculty. These studies concentrated on born global strategies from one industry point of view and used case studies as methods. These master theses are looked at closely during the research project. This research will take into account all the previous studies made in the field of SWOT analysis and especially about the weaknesses part of the analysis. However, for born globals the criteria for most common weaknesses is new and therefore it defences its contribution to the international business research.

Moreover, the methodology used in this survey is quite rare in failure studies. Therefore the study will also contribute a study method of fatal strategy failures in high tech companies. The efficiency and accuracy might grow by using the methodology employed in this study.

1.4 Research Problem

Based on previous seminar project work, discussions with academics and review of literature the research problem seems to be clear. The seminar paper uncovered a total of 14 born global bankruptcies during 2001-2002. In the seminar, however, the time span for research materials was from 1995 to 2002. In other words, these fourteen companies failed almost simultaneously. However, the survey for meso and macro environment changes told only a little about the underlying problems in these companies. Only a specific result of that study showed that born globals differ from common SMEs by the time distribution of bankruptcies. A statistically reliable finding also was that born globals tend to die younger than ordinary SMEs. Therefore the research problem for this master's thesis should be: What are the underlying microlevel reasons behind born global bankruptcies?

1.5 The Goals of the Research

This study tries to answer questions that sharpen the picture about the failures and weaknesses of born globals. Those questions can be listed as follows:

- What are the strategy reasons in a born global bankruptcy? This question tries to find an answer for understanding the dynamics of failing process. The study will seek the most common reasons and list the most significant of them. It will also discuss each of these in more detail.

- Can the bankruptcies be divided in groups of similar behaviour? This answer will make it easier for entrepreneurs to plan a strategy, while failure patterns can be more accurately recognized.
- How are the reasons of bankruptcies compatible with POM$ICA-model used in previous born global studies? This gives information for future researches in POM$ICA about what kind of weaknesses each strategy carries.

The first objective is to find out the reasons behind of born global failures. Many well-managed firms have also bankrupted and 'why' is the question. Answers are to be found in different analyses of the cases about failed born global companies. In summaries of those cases the research tries to tell about a single process of failing of one particular company.

The second objective of this study is to investigate similarities and differences between different failures of born globals. If the depth of the study allows more, knowledge could be gained through comparison with common SMEs. By analyses of differences and similarities groupings of these companies can be done. When explanatory factors behind these failures can be more accurately interpreted it makes it easier to understand.

The third objective of the research is, as mentioned above, to develop a checklist of born global weaknesses that have caused or were in the background of the failing company. This list of the most common reasons should help entrepreneurs of born global companies to develop better strategies, which eliminate weaknesses, which have been found to be crucial for born globals.

1.6 Definitions

1.6.1 Globalization Drivers of SMEs in Finland

SMEs as well as the born globals in Finland feel the pressure to expand their operations outside their national borders. Finland is a good example of the so-called SMOPEC country. The letters come from small and open economy. Finland is small in terms of people and therefore the market size is also small. The market is too small for largely

R&D orientated companies when the sales from the home market don't cover the development expenditure. Finnish economy is one of the most open in the whole world. Finnish companies have a privilege to utilize large EU inner markets, but they also have close and tight relationships with former eastern block countries. One could argue that Finland is the most open economy in world. (Luostarinen 2002)

1.6.2 Born Global Company

The definition of born global company is loose. It is defined in terms of globalization degree i.e. sales outside home continent should achieve at least the level of 20% - 30% within ten years from establishment. All the born global companies have a strategic vision to become a global company in near future. (FIBO project)

Most common areas of business are high-tech, high-design, high-service, high-knowledge and high-system businesses. (Kirpalani & Luostarinen 1999) Five master's theses have been done concerning the strategies of these companies. These theses will deepen the analyses of strategy mistakes in the companies failed.

1.6.3 Small and Medium Sized Company

Small and medium sized companies (SMEs) are defined as companies that have no more than 250 employees, the annual turnover is less than M€ 40, or the balance sheet doesn't exceed M€ 27. If the company is considered to be small it cannot have more than 50 employees and micro companies employ 10 persons at most.

1.6.4 Failure

In this study failure is seen as a bankruptcy or the shutdown of the company. Acquisitions and mergers are left out because it is hard to decide from them if it is a true failure. The so-called 'living dead' in venture capital markets are also left out. That term usually refers to companies that survive and have enough customers to pay the entrepeneurs' salaries but which are no success stories with high IPO (initial public offering). These are also hard to define as failures because entrepreneurs could be actually quite happy with the situation in a stable and less complex company environment. So in short: failure in the study is the total shutdown of business.

2 Literature Review

As mentioned above, there is a lot of literature about bankruptcies available. Therefore there is no need to make those studies again but just to refer to those books and articles. Also when referring to books from other areas of economical studies, it gives a wider and a more accurate picture about the issue in hand.

From the international business side this study relies on literature about company strategy components, internationalization, former studies about born globals, entrepreneurial studies and SME financing. In entrepreneurship the study will rely on Koski's doctoral dissertation about bankruptcies. The study will use his doctoral dissertation as reference to bankruptcy theories of small business. In finance the core paper is John Cochrane's working paper about Venture Capital Markets. It was recommended reading and it is referred to in order to gain reliability for analyses of born globals in venture capital markets. Some other literature will be surveyed for instance from accountings perspective and from legal perspective as well.

2.1 Strategy Literature

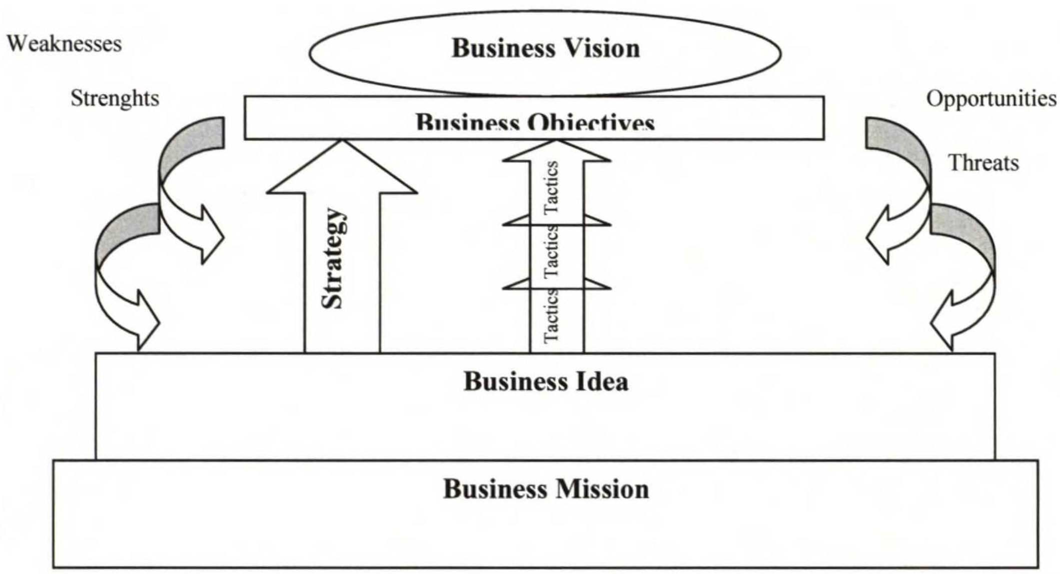
Firstly the study will illustrate the role of strategy planning in companies. That literature survey discusses the business mission, business idea, business vision and objectives. In addition it will also discuss the most common ways of analyzing a company environment and the outer environment, which is uncontrollable to a company.

There are ten recognized different types of strategy components. Those are discussed in this chapter in the following order: product, international operations mode, market, pricing, intermediate, customer, advertising (market promotion), finance, human resource management, and investment strategies. Last three are only introduced, while their importance is more on the companies that are in a more mature stage than the companies in this study.

2.1.1 Components of Strategy planning

In this survey the study draws basic components of strategy planning. The study builds the components in order of importance to a start-up company. The purpose of this literature analysis is also to illustrate the role of strategy in a company. It is important to discuss while the aim of the study is to find out the strategy reasons behind the bankruptcies of born global companies. The components of strategy planning can be illustrated with a picture (below):

Chart 3 Components of Strategy Planning



(Luostarinen 1998)

The purpose of the existence of the company is its business mission. Every organization exists to accomplish something in the environment. It is specific and usually clear from the beginning. Mission is the guiding force of the whole business planning. Sometimes, however, the company grows into something else. (Kotler 1984) Then it is time to ask some fundamental questions: What is our business, Who is our customer, What is the value to the customer, What will our business be? These simple questions are usually the most difficult to answer. (Drucker 1973) The company mission is shaped by five elements which are: 1) its history, 2) preferences of the management (or owners), 3) environmental considerations, 4) resources, and finally 5) distinctive competences. (Kotler 1984) The business mission is more than just a statement in a brochure. It should be the guiding force of the whole business. It is the company's stepping-stone to the business it has chosen. In informal discussions[1] with academics, entrepreneurs and investors it seems that Finnish companies are perhaps too technology-oriented. This is not a good starting point for a company. Customer orientation is widely accepted as the foundation of business mission, but in case studies many interviewees were confused about the industry value system. Should they please end users or large intermediates, was a common problem.

The formulation of the business idea should start from the business mission. The business idea combines the company's capabilities and the customers' needs. The key thing in recognizing a business idea is the ability to define such customer needs that the company with their existing capabilities could satisfy (Lokka & Möller 1994). The business idea formulation is always more about interpreting weak signals and idea storming in addition to external business idea analyses (Ansoff 1976). Grant (1991) gives a framework for business plan creation. It is a five-phase planning process, which starts from the 1) analysing of company resources, 2) defining company capabilities, 3) analysis of relative competitive advantage, 4) which leads to strategy formulation. Finally 5) the company recognizes a resources gap and forms an investment strategy for it. (Grant 1991). As a summary from the business idea literature surveyed, one could conclude that a good business idea firstly satisfies customer's needs, secondly bases on the company's business mission, thirdly it is feasible to accomplish based on current strengths and weaknesses and finally it has a sustainable competitive advantage. In the context of this study, the business idea is one of the key components that might have caused a failure. The business idea analysis is the key part of understanding causes of

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[1] At this point one should note that the conducter of the study has had a possibility to discuss with various experts of venture capital and entrepreneur training field trough his occupation in Venture Cup business plan competition.

failures, even though this study concentrates more on strategy in itself than in business idea analyses.

The business vision serves many purposes in business strategy planning. The vision is a compass to guide a company, i.e. it gives strategies a direction. The vision is a stretch: when it is challenging enough for employees it enhances their performance. The vision is a map, which is created from company values, based on company mission; it carries awareness of current situation and it's coming together to produce a shared future. A good vision has six qualities: 1) it motivates and inspires, 2) it is a stretch and moves towards greatness, 3) it is clear and concrete, 4) it is achievable, 5) it is consistent with company values and mission and 6) it is easy to communicate, clear and simple. (Scott et. al. 1993) In the context of this study the business vision had a significant meaning in identifying born globals. The vision had to have a global business aspect in it in order to be categorized as born global.

The quite blurred business vision should be transformed into concrete business objectives. The company seldom has just one goal; usually it is a mix of several objectives (Kotler 1993)[2]. Few examples of business objectives are profitability, sales growth, market share improvement, risk containment, innovativeness, reputation, etc. It is important not just to list the business objectives, but also, to list them in a hierarchical order. This makes it easier to communicate. If possible, the objectives should be stated quantitatively, e.g. instead of just stating: the company aims to increase its market share, the objective should be: the company will increase its market share by 50 % in five years. I.e., the business objectives have to have magnitude and a time span. Business objectives should also be realistic. They should take the SWOT into account and not be based purely on wishful thinking. Final requirement for the objectives of the company is that they need to be consistent. Every objective has its own trade-off with another and thus it is important to stick with the hierarchical rules created earlier. (Ibidem) According to informal discussions with business academics, business angels and

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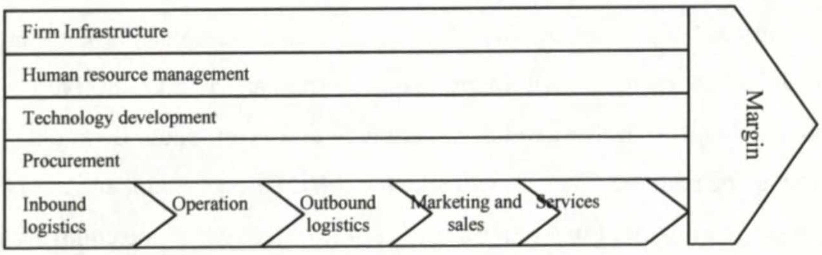
[2] Kotler in his studies transforms missions to objectives and thus skips the whole vision and business idea formulation. None the less, it is perhaps useful for a large business, but in context of SMEs and born globals those parts play a significant role in strategy planning.

venture capitalists it seems clear that a company can either set growth objectives or profitability objectives, but it is impossible to achieve both at same time. The business plan that claims otherwise is, according to them, unrealistic.

Before the study discusses strategies more thoroughly, it is crucial to know what influences to the path the company is choosing. Therefore the study brings up few strategy analysis tools to explain the formulation of SWOT (i.e. strengths, weaknesses, opportunities and threats). Strengths and weaknesses are internal for the company, e.g. personnel relations, management, manufacturing processes etc. On the contrary, opportunities and threats are external, i.e. rivalry, macroeconomic changes etc. The study discusses those analyses by first explaining internal analysis tools and then company external analysis tools.

As an internal analysis tool for business, perhaps the most famous is Porter's value chain. The value chain analysis allocates corporate activities into slots of processes. It makes it easier to understand the behaviour of costs and the existing and potential sources of differentiation. This analysis tool gives the management a possibility to identify core competences and competitive advantages of the company. (Porter 1985) (Picture below)

Chart 4 Porter's Value Chain



The four straight boxes illustrate the firm's support activities. They also represent the fixed costs. Below the arrows is the actual production process. All that leads to the profit margin of business. The comparison of the company's value chain with that of the competitors' is useful in order to identify key competitive advantages. (Porter 1985) In the context of this study, Porter's value chain revealed weaknesses mainly in marketing and sales component. However, some problems were also in inbound logistics as well as actual operation. Technology development was seen as a core competence in every company surveyed.

For external analysis for strategy formulation one of the most famous is the PEST analysis. The letters stand for Political, Economical, Social, and Technological market elements. The PEST analysis is developed to analyze the environments' important factors affecting the organization. Moreover, it assesses their impact on the operations. The starting point of the analysis is that the manager considers which environmental changes have been predominantly important in the past. The analysis takes into account the impact of events to company's future. (Jonson & Schokes 1993)

Chart 5 Components of PEST-analysis

<table>
<tr><td colspan="2">Components of PEST-analysis
• Which environmental factors are affecting the organization
• Which of these are the most important at the present time
• Which of these are the most important ain the next few years</td></tr>
<tr><td>Political/Legal
• Monopolies
• Environmental protection laws
• Taxation policy
• Foreign trade
• Employment laws
• Government stability</td><td>Economic
• Business cycles
• GNP- trends
• Interest rates
• Money Supply
• Inflation
• Unemployment
• Disposable income
• Energy availability and cost</td></tr>
<tr><td>Socio-Cultural
• Population demographics
• Income distribution
• Social mobility
• Lifecycle changes
• Attitudes towards work and leisure
• Consumerism
• Levels of education</td><td>Technological
• Government spending on research
• Government and industry focus on technological effort
• New discoveries employment
• Speed of technological transfer
• Rates of obsolescence</td></tr>
</table>

In the context of this study, many born globals overlooked the global economic trends (see chapter 3). The short period of time when finance wasn't scarce made many entrepreneurs believe that this was a permanent state and aimed for higher, i.e. longer payback times. Many also misread the speed of technological development, which proved to be slower than anticipated. Moreover, many overestimated the rate with which the consumers could adapt new technology.

The most famous strategy tool for corporate external analysis is Porter's five forces: 1) threat of new entrants, 2) threat of substitutes, 3) bargain power of suppliers, 4) bargain power of customers, and 5) the industry rival. (Porter 1998) Even though this is an external analysis tool, the study will introduce the forces quite carefully. Misinterpretation of the existing environment will lead to wrong strategy choices and thus it is important to illustrate here what is meant by each threat.

The threat of new entrants means that in any given industry, there is a possibility that the competition will increase through new companies entering the market. In some industries this is more of a threat than in others, depending on entry barriers in the industry. Entry barriers are economies of scale, product differentiation, capital requirements, cost disadvantages (other than scale based), access to distribution channels, and government policy. (Ibidem) In the context of this study, entry barriers are assumed to be small. Even though many companies claimed that their products are very different from their rivals or their technology is so superior that others have to develop their technology with far greater expenses, this proved to be more an illusion than a reality.

The threat of substitutes means that the customers will change their buying behaviour in favour of different product. The substitute products will place a ceiling for prices and/or limit the industry's growth. The substitutes that will deserve the most attention strategically are 1) subject to trends and 2) produced by industries with high profitability. (Ibidem) In context of born globals the threat of substitutes is vivid. The high technology, high system, high service, high know-how and high design industries are typically high profitability industries as well. In Porters listing the study will make an addition. If the company is in know-how intensive industry with quite abstract products, the substitutes should be closely monitored. The study will also note that if the customer company decides to manufacture the product or the service by itself, it is an option for them, i.e. a substitute.

The bargain power of suppliers can be seen if they have the power to reduce quality or increase prices. If the power is at its peak, the company cannot change its suppliers even if this happens. The customers, too, have their ways to cut a company's profitability. Customers can demand lower prices, higher quality, and better service. They can make this happen if they can play the competitors against each other. The supplier is powerful if

1. the industry is dominated by a few and it's more concentrated than the industry it sells to was
2. its products are unique, or at least strongly differentiated
3. it is not obliged to contend with other products for sale
4. it poses a great threat to integrate forward
5. the industry in which it is selling is not a big customer

Similarly, a buyer group is powerful when:

1. it's concentrated and buys in large volumes
2. the products that it purchases are standardized
3. the products that it purchases are components of its products and an insignificant factor of its price
4. it earns low profits and seems to be willing to reduce its purchase costs
5. the product of the industry doesn't save buyers money
6. the buyer poses a great threat to integrate backward

(Ibidem)

In the context of this study, the born globals were in a position where their buyers had significant bargain powers. Typically the products were sold to, e.g. telecom operators: which were concentrated (1), the products formed a fraction of their whole service (3), they earn low profits because dense rivalry among them selves (4) and they might just them selves establish a company for their production of the service and thus integrate backward (6).

Industry rivalry is seen as small companies jockeying for position. This is a source of major concern when the 1) competitors are numerous, 2) industry growth is slow, 3) products lack differentiation, 4) fixed costs are high, 5) capacity is normally augmented to large number of customers, 6) exit barriers are high, and 7) rivals are diverse in strategies, origins, and personalities. (Ibidem) In the context of this study the maturity state of most born global industries is so young that an industry rival has not become a major concern for these companies. Even though competitors are numerous, the products are usually unique, industry growth has been high and exit barriers low.

From the analyses above we can form a SWOT analysis. As strengths and weaknesses (intra company), the strategy analyses of the value chain and accounting will provide answers. In addition, the opportunities and threats are analyzed in extra company analysis tools, i.e. PEST, and Porter's five forces. When combined in a two-by-two frequency table, the basic SWOT is formed. Two most important features of SWOT-analysis are to limit the number of possible strategies and make them easier to understand by managers (Lahti 1988). Charpentier (1992) also uses the SWOT tool to position a company in competition. That might give useful information in developing one's own business further. Imitating Rope (1987) one could combine strengths, weaknesses, opportunities and threats and form strategies from each (picture below). (Ibidem)

Chart 6 SWOT-table

	Weaknesses	Strengths
Opportunities	'Fix weaknesses, employ opportunities'-strategy	'Empower your strengths'-strategy
Threats	'Crisis-management'-strategy	'Sustain strengths'-Strategy

(Ibidem)

In the context of small born global companies, many had identified potential threats and own weaknesses, but no one had developed separate strategies for crisis management or to sustain strengths. It seemed that every team of entrepreneurs only had a strategy for empowering their strengths, which lead to one obvious reason behind bankruptcies - strategic rigidity (see chapter 6.1)

2.1.2 Strategies

In the previous section the study discussed the components of strategy planning and strategic analysis tools. In this chapter the study will take a more detailed look on the 1) product, 2) operations, 3) markets, 4) price, 5) intermediate, 6) customer, 7) advertising strategies as well as cover lightly the 8) investment, 9) human resources and 10) financing strategies.

McGrath (2000) forms a product strategy in four stages. He starts first by building the foundation, then defining the offerings, then addressing market realities and lastly exploring successful expansion paths. By building the foundation he refers to product platform strategy. "Product platform is a collection of common elements, particularly the underlying technology elements, implemented across a range of products. It is primarily a definition for planning decision making and strategic thinking." (Ibidem) All in all product platform makes the business idea concrete (discussed above) and categorizes the ingredients of product billets, i.e. it forms the foundation. "A product line strategy is a time-phased conditional plan for the sequence of developing product offerings from a common platform, with each product offering targeting a specific market segment." (Ibidem) By product offering one emphasizes that products are nowadays usually sold in a package of services, know-how and tangible goods. The product line strategy also develops a sequence to illustrate development and release dates, and it is time-phased, meaning that it takes into consideration the product life cycles. Finally it is conditional, meaning that it takes into account the evolving market conditions, competitive factors and or resource availability. "Platform and product line strategies are powerful tools if applied effectively; a market platform plan (MPP) framework integrates knowledge about the market and knowledge about the product and its defining technology." (Ibidem) The market platform plan identifies:

- characteristics and priority order of market segments
- basis of customer value
- offerings to customers
- monitoring plan to sense external developments
- economic metrics for measuring success.

Once all these phases are identified and completed, its time to look ahead and think about expansion. A good product strategy creates and launches continuously new products to markets and thus fuels the rapid growth. However, it is crucial to understand that a company has to leverage both technological and market knowledge at same time, while especially in high technology markets appear and disappear quite quickly. (McGrath 2000) In the context of this study product strategies had elements of high technological skills. However, the market sensitivity was not on the same level. It seems that in the Finnish invention field the blinding greatness of one's own invention makes it impossible to detect negative signals from the markets.

International operation strategy means, among others, the selection of an international business mode. The most common way of outward business operations is still (1993[3]) exporting. Nowadays it is at least the most straightforward way of foreign sales. Exports can be divided into three different types of export: 1) indirect export, 2) direct export and 3) own export (Luostarinen & Welch 1990). Direct export can be operated with a domestic distributor, a joint export organization, a publicly owned export organization, another industrial company[4], a foreign-owned company located in the home country, foreign tourists visiting the country, sales in domestic ships sailing in foreign waters. Direct exporting means that the company takes care of exporting activities and is in direct contact with the first middleman in the target country. And finally, own export means that there are no middlemen in the supply chain between the producing company and the end customer. (Luostarinen & Welch 1990)

In addition to conventional exports there is a variety of other international business modes. Those are licensing, franchising, management contracting, subcontracting, project operations, and subsidiary operations.

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[3] The most recent estimation Luostarinen & Welch (1993)

[4] referred as piggy bagging in context of this study

First, licensing "is a contractual transaction in which the owner of certain knowledge asset (…) sells to another organization or individual the right to use (…)." (Luostarinen & Welch 1990)[5]

Secondly, according to the International Franchise Association franchising is: "A franchise operation is a contractual relationship between the franchisor and franchisee in which the franchisor offers, or is obliged to maintain a continuing interest in the business of franchisee in such areas as know-how and training; wherein the franchisee operates under a common trade name, format and/or procedure owned or controlled by the franchisor, and in which the franchisee has or will make a substantial capital investments from his own resources." (Mattila et.al. 1998) Basically this is a similar mode compared with licensing with the exception of greater limitations of franchisee. The degree of freedom lost in a franchising deal is compensated with a more secure business development in the beginning of a contractual relationship.

Thirdly, the management contracting is an arrangement under which the operational control of the enterprise is given to a separate company, which performs the necessary managerial functions in return for a fee (Pugh, 1961). This is mainly used in the developing countries, which might lack the necessary skills to operate a business unit themselves.

Fourthly, contract manufacturing is a process, which exists when part (only a part) of the final product is produced in by foreign contractee. (Luostarinen & Welch 1990)

Fifthly, one of the international business modes is project operations. They can be divided into three separate types: a) partial project, b) turnkey project and c) turnkey plus project. In a partial project a company provides a part to a customer company. In a turnkey project a company is responsible for the whole project. Lastly, in turnkey plus

[5] This is nowadays a quite common type of an international business mode, especially in software industries.

project a company is responsible for the whole project as well as operating the business afterwards (see management contracting). (Luostarinen & Welch 1990)

Lastly, the subsidiary operations may be defined by two major points of view. From a macro perspective they are long-term investment flows from a home country to a host country. Microlevel perspective sees it as a way for the company to enter foreign markets. (Ibidem)[6]

The importance of a market strategy cannot be overestimated. Papadopoulos (1987) argues that the magnitude of market strategy comes from five sources. Firstly, the cost of errors in an international scale is far more than those at home. The cost of errors in international market selection yields from costs of lost opportunities, loss of motivation, hindered urge to internationalize further. Secondly, the market selection plays an enormous role in the corporate strategy. It takes more time from the management than other strategy components and also involves middle managers more in actual detective work of market selection. Thirdly, the market selection strategy is used by competitors, which are already heading towards the market integration. If the market selection fails, the company will loose the competitive advantage, which could have been gained through increase in scale. Fourthly, diversity in large markets is far greater than in a small and open economy. If the market selection and entry fails the company looses an opportunity to generate scale through scope. A good product focus generates competitive advantages for a company. Lastly, the gains that a correct market selection yields are large. It is evident that when the stakes are this high, no one in a company doubts the importance of this strategy component. (Papadopoulos 1987)

Pricing strategy and earning logic are fatal elements in strategy. The study will first discuss the different pricing strategies, then deciding trade terms and then focus more on earning logics. Experience curve pricing is evident form of pricing strategies (Dolan & Simon 1997). Gained market share makes it possible to increase efficiency and thus reduce unit costs for the company. This should be transferred to prices so as to

[6] For further details about international business modes please read chapter 2.2.1 also see chart 7 *Relations between marketing operation modes and sales channels (Gabrielsson 1999)*

accelerate the positive circle and to create a competitive advantage. (Ibidem) However, any kind of pricing strategy that concentrates on production costs oversimplifies the pricing process in export marketing (Stottinger 2001). Pricing has many objectives besides short-term profits. Albaum et. al. (2002) lists as pricing objectives at least:

- Satisfactory return on investment
- Maintaining market share
- Meeting a specified profit goal
- Largest possible market share
- Meeting a specific sales goal
- Profit maximization
- Pricing at the high end of the price range
- Highest return on investment
- Prices are set at a high level and lowered after certain period of time
- Meeting competition

(Ibidem)

Five strategies were identified as the most common in export marketing. Firstly, skimming the market strategy, which means that the company objective is to optimize short term profits from the market and then to retire from the region. The second strategy is sliding down the demand curve, which means that the company reduces prices more, faster and further than it is forced to do in view of potential competition. This might serve the objective to become well established in the market before competition increases. The third strategy is penetration pricing, which means low pricing in order to create a mass market rapidly. Fourthly, a company might use a pre-emptive pricing strategy. This means setting prices so low that competitors might be discouraged from entering the markets. The last pricing strategy is extinction pricing, the purpose of which is to eliminate existing competitors from international markets. (Ibidem)

Deciding trading terms is one important element in pricing. Different trading terms are ex works, free on board, free along side, cost and freight, cost insurance and freight, and ex dock[7]. In deciding trading terms the company management should consider the following factors (Albaum et.al. 2002):

- Whether shipment will be made on domestic or foreign carriers
- Availability of insurance coverage
- Need for cash of a company
- Easily comparable prices for importer
- Currency convertibility issues
- Government requirements

(Ibidem)

An earning logic of a company could be bases on several different models. A company could get revenues, in addition to conventional sales, from licensing, revenue sharing, costs, through complementary products, through media, or the hybrid from some of the above. Licensing is one of the most used in high know-how business (Ojala 2003[8]) and it is also the most common earning logic in mobile industries (Durlacher Research 2001)[9]. Revenue sharing is also one way to agree on licensing fees, but in those, for instance telecom operators, make the greatest share because of their large bargaining power. The cost-based earning logic is commonly used in project-type development services (Ojala 2003). Using complementary products as a revenue model, the company gets its earnings from end-users and not from the primary customer. End-users got, e.g. the software developed by the firm through hand sets made by the primary customer. The end users purchase services for a software, which is embedded in the company's handset. (Ibidem) In the media model a third party pays the producer for the right to advertise on their platform, which is free for users (Durlacher 2001)[10]. The hybrid

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[7] For the purpose of this study, it is not useful to go in more detail due maturity state of bankrupted born globals

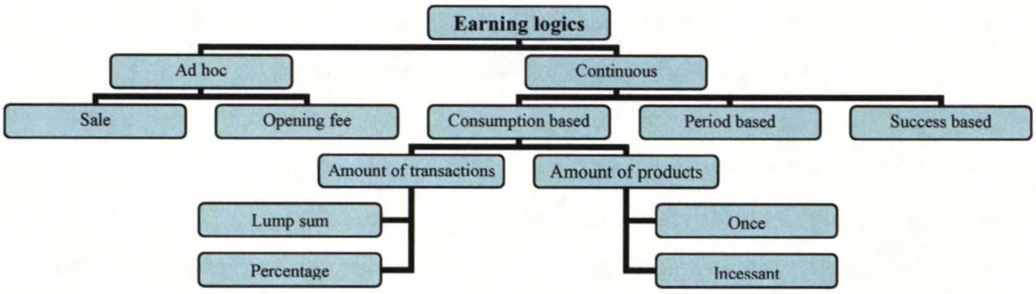
[8] Ojala (2003) refers to a non-existing web article of Hietala, J., Maula, M., Autere, J., Lassenius, C. & Autio, E (2002): *Finnish Software Product Business: Results from the National Industry Survey*, Software Business and Engineering Institute, Helsinki University of Technology

[9] For further details see chapter 2.1.1 on international business modes

[10] e.g. Google internet search engine

model, as said above, means a combination of the earning logics above. Below is a picture that illustrates different earning logics:

Chart 7 Earning logic



(Adapted from Gebauer 2001)

The issue of earning logic rises whenever discussing about bankruptcies. Weaknesses in earning logic are immediately seen in cash, and this will eventually lead to a cash crisis.

An intermediate strategy in context is both to supply channel choices and distribution tactics. Traditionally, a distribution channel is the means by which the products are physically transferred through the system and through which the acquisition transaction takes place (Christopher 1986). Naturally, the company could transfer products to the customers itself, but the reason for the presence of intermediaries is well argued. In a well functioning supply channel five gaps are narrowed between producer and consumer (Alderson 1954):

1. Time gap, which means that consumers can buy goods in intervals even if the production is continuous
2. Space gap, which means simply the distance between consumer and producer
3. Quantity gap, which means that the producer runs large quantities at the time from its processes and the consumer usually buys smaller volumes

4. Variety gap, which means that the company should focus on producing a small variety of products even if the consumer needs a larger variety of such products
5. Communications information gap, which means that the producers do not know where the potential buyers are and the customers where the products can be purchased

(Ibidem)

Shortly, the intermediate comes in question when the cost of closing one of the gaps mentioned above is greater without an intermediate than it would be with an intermediate. In a meso environment perspective it is evident in an oversimplified setting: If there are five producers and five consumers and no intermediates, the overall transfers of goods and information routes are twenty five (five times five), but with one intermediate the same routes decrease only to ten (five plus five). (Christopher 1986) "The international business and marketing literature has developed distinct definitions related to sales channel structures which, however, can easily give a rise of confusion"[11]. For instance, there are differences in concepts of degree of directness and ownership of channel. Degrees of selectivity and number of intermediates are important in both streams. (Gabrielsson 1999)

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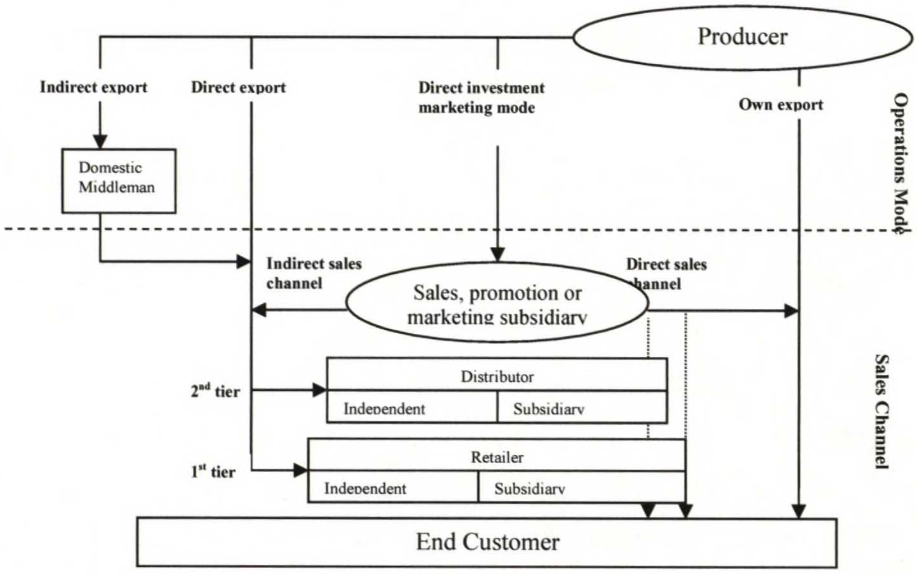
[11] See chapter 7.2 *Reliability and validity of the Research* for more details about confusions in interviews with terminology.

Chart 8 Relation between marketing operation modes and sales channels



(Ibidem)

In the context of this study the typical intermediate strategy was to sell to a large national telecom company which would then market the product to end users. In high service products the end-user is more likely to be reached directly, but in high systems, high technology, high design (not is scope of this study) and high know-how the companies used some intermediates.

The customer strategy consists of decision related to customer segmentation, customer value creation and interaction between the customer and market strategies on a global scale. The customer segmentation of born globals is based on their choice of niche. Furthermore, it is assumed that the companies don't gain a critical survival mass unless they globalize. Thus customer segmentation for born globals is done at a global level, not locally. Customers of born globals tend to be large for high tech companies. Born globals seem to be suppliers for larger high tech companies. One explanation for this is that by selling to a large customer abroad, the companies avoid localization costs (see communication and information gap in paragraph above). (Junkkari 2000) A significant factor in customer strategy is also the customer orientation. A small company should create such a niche that there are no close rivals. In that way even a small born global company can own the customers. (Rennie 1993) The value creation in this context means that many born global companies are in the process of increasing their processes' efficiency or the output of their customers. In a way they are innovation assets for their customers. (Autio&Yli-Renko 1998, Junkkari 2000)

The advertising strategy tells how the company is going to meet its objectives by using a creative mix. Objectives for advertising can be to:

- create awareness
- create comprehension
- convict
- wake desire or
- provoke action[12]

The creative mix is formulated from four elements: 1) the product concept, 2) the target audience, 3) the communications media (or medium) and 4) the advertising message. The product concept tells what the product means to customer, i.e. product values. The target audience refers to people that the advertising will approach. As the target audience it is crucial to understand, not only the end user of the product, but also the decision maker of the purchase. Thirdly, the communications media refers to the method, how the message will be transmitted. Lastly, the advertising message is what the company plans to say to its target audience and how it plans to do that. (Bovée & Arens 1986)

In the context of international or even global companies, branding is a significant element of the advertising strategy. Shortly, it is argued that the brand means positioning a product in relation to competition by functional attributes and values. The branding strategy objectives contain at least 1) to distinguish from competitors, 2) to build customer loyalty, 3) to decrease price sensitivity of customers, and 4) to standardize quality of product. The globalizing company has two main alternatives to brand their products. Either they can use global brands or use local and regional brands.

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[12] In this concept it is important to note that the list is in order from large to small quantity and usually drawn in a form of a pyramid, where action is the smallest piece.

A global brand involves offering a consistent and standardized brand position and the same product formulation to customers. By consistency it is meant that the company aims to give the same reputation of products in eyes of all their customers. The benefits of a global brand involve economies of scale in R&D, production, and marketing. (Hankinson & Cowking 1996) In spite of the benefits it is still realistic to assume that the small born globals would employ a private label strategy. The global brand strategy is hard to contest; its creation requires large investments in advertising and access to local distribution networks that are willing to carry the brand. Therefore a private label, i.e. a product of the company, which has its customers' name on, has an advantage when the company seeks rapid volume growth via instant market access. (Jeannet & Hennessey 1998, Junkkari 2002)

2.2 Internationalization Literature

2.2.1 Traditional Internationalization Literature[13]

The smallness and openness of domestic markets form the two push factors in Finland. A complementary pressure towards internationalization is the foreign pull, which is built from the same openness of the market but, on the contrary, large size. Both the push and pull forces are said to form a pressure balancing system. The smallness has always been a challenge for Finnish companies and the liberalization of customs due to recent economic development has even increased openness. That push pressure has been balanced by similar developments in larger countries. In total, the increase in openness of a small country seems to correlate with the number of exporting firms. (Luostarinen 1989)

The internationalization process has been difficult to define. However, Luostarinen (1979) has introduced a broad enough definition. It argues that internationalization is a holistic process of increasing involvement in international operations and it includes both inward and outward operations. (Luostarinen 1979, 1994) If we desire to compare separate firms from one to other, we need a useful indicator for the purpose. The by far most used is the degree of foreign sales per total sales. However, a need of a broader

[13] International business modes were covered already in chapter 2.1.2. Look there for more information.

concept is evident. If one wishes to measure involvement of one company in foreign markets, one should ask what, how and where it internationalizes, i.e. products, operations and markets. One could also measure the internationalization of the organizational structure, personnel, and sources of finance. This all would give a much more accurate picture of company's international involvement. (Luostarinen & Welch 1990) In the context of this study, the target degree of global sales is used for determining whether the company is a born global or not. Once that is decided the internationalization process is chopped in products, operations, markets, pricing, intermediates, customers and advertising. This is a more accurate and updated version of this internationalization process measurement and therefore serves the purpose better.

There are four types of economic environments for an internationalizing company. As said above, Finland is a small and open economy, which is a typical SMOPEC country. The stage pattern of internationalization is more relevant for firms in small and open economies than in larger and perhaps less open markets. In SMOPEC countries, companies tend to internationalize by harsh push forces and on the contrary, firms in large countries have a tendency to internationalize mainly by foreign pull. In addition to large and SMOPEC countries there are also economies in transition and developing countries. Economies in transition, i.e. mainly eastern and central European countries still have some issues to be solved. Some of those are how to vary the industrial and export structure successfully and how to get companies to higher stages of internationalization profitably. Developing countries seem to face similar problems. Perhaps the holistic internationalization pattern would be useful not only for transitional economies, but also for developing countries. Similar to the Finnish experience, these countries should courage inward internationalization in order to gain foreign technology, marketing and management know-how. (Luostarinen 1994)

An outward internationalization pattern can be divided in two different classifications: functional and investment. Functional classification divides international operations again in two different categories. Firstly, marketing operations are, for instance, direct or indirect export operations, or sales promotion, warehousing, service, or sales units. Secondly, production operations are licensing, franchising, contract manufacturing, turnkey or co-production operations, or assembling or manufacturing subsidiaries. Second type of classification is investment classification. These can be also divided in two groups: non-direct investment operations and direct investment operations. Non-direct investment operations consist of different types of activities, which don't require the company to invest in the other country, such as different types of cooperative operations, and operations that can be managed from home country basis. Direct investment operations demand much higher involvement from the company in form of investment in subsidiaries outside home country. (Luostarinen 1989)

These two classifications can be combined. These form four elements: non-direct investment marketing operations (NIMOS), non-direct investment production operations (NIPOS), direct investment marketing operations (DIMOS), and direct investment production operations (DIPOS). See chart below: (Luostarinen 1989)

Chart 9 Foreign Operations Concept

NIMOS	NIPOS	DIMOS	DIPOS
• Indirect export of goods • Direct exports of goods • Service export operations • Know-how export operations • Partial project operations	• Licensing operations • Franchising operations • Contract manufacturing operations • Turnkey operations • Co-production operations	• Sales promotion subsidiaries • Warehousing units • Service units • Sales Subsidiaries	• Assembling subsidiaries • Manufacturing subsidiaries

(Ibidem)

The types of operation are in order of challenge, NIMOS-DIMOS-NIPOS-DIPOS. The competence was measured by degrees of financial commitment, managerial commitment, market control, financial risk and political risk. Therefore, the result from Luostarinen's research seems logical. Finnish firms internationalize in the same order. This is due to the gained market know-how and managerial experience. With some experience on the foreign markets, the management is willing to take larger risks financially. This leads the advancement in the internationalization pattern. (Ibidem)

The internationalization strategy of the firm according to the POM-strategies has clear patterns. In products, less experienced companies are more likely to introduce physical products into foreign markets and then move to services. The third stage of the typical product strategy of internationalizing company is to move to systems (i.e. combinations of those two) and finally to know-how. The same implies to operations. In Finnish markets there is clear evidence that companies follow NIMOS-DIMOS-NIPOS-DIPOS pattern in their internationalization operations. Non-investment strategies are easier to manage and they carry fewer risks than direct investment strategies. Similarly in product strategies international experience and depth of internationalization of operations correlate strongly. The market selection goes through similar development than product and operation. When analysing markets' business distances, one should take into account the 1) physical distance of the market, 2) cultural distance of the market and 3) economic distance of the market. These three elements can be joined because their quite similar role in one single business distance component. Furthermore, the markets can be divided into five categories: hot, warm, medium, cool and cold. In this concept the hot market is the one, which is near, has quite a similar culture and its economy works in a similar way. On the contrary the cold market is far, has a very different culture and its economy is unfamiliar to the company. In this pattern the company internationalizes starting from hot countries and moving towards colder markets. (Luostarinen 1989)

Why do companies internationalize in the first place? Evidence indicates that the process is not spontaneous but rather a result of a line of decisions (Starbuck 1971 cite Luostrinen & Welch 1990). So, what drives these decisions? Luostarinen and Welch (1990) list six factors that they have identified in their research: 1) Resource availability, 2) knowledge development, 3) communication networks, 4) risk and uncertainty, 5) control and 6) commitment. By resource availability the researchers mean access to raw materials, finance and similar, which might be scarce domestically. But resource availability may limit the expansion at any given point in time - the constraint is not static. In that sense any actions, which widen the availability provide the basis for increased foreign operations over time. But clearly there is more to resource question than just physical goods or finance. A crucial factor in the ability to perform is intangible knowledge, i.e. knowledge of the markets, about techniques of foreign operations, about key people etc. This is not acquired easily; therefore learning by doing explains much of the evolutionary patterns of internationalization. In addition, one factor is that business is done between people. Therefore it is important to establish personal contacts and social interaction. Networks between buyers and sellers form the basis of effective communication. From a seller's perspective this means that establishing foreign sales units might reduce uncertainty and risk perceived by their buyer. To be on the market increases the trustworthiness of seller. Getting involved in foreign markets also increases the control of the seller in the markets and hence reduces the risk of inefficient communication through intermediates. This all, combined with commitment to people and business mission to go to foreign markets, help to explain the continued forward momentum of the internationalization process of individual companies and thus why the evolutionary pattern has been found. (Luostarinen & Welch 1990)

2.2.2 Born Global Literature

For this research it is vital to define the born globals as accurately as possible. Definitions have been borrowed from earlier researches on this field. Without a good definition explaining the born global phenomena the whole research will collapse with its topic, research problem and contribution.

Born globals are, as defined earlier, companies that go abroad through rapid growth. In an accurate FIBO definition born globals are seen as companies which have a global vision and have within ten years over 20% of their sales coming from outside home continent boarders (Luostarinen & Gabrielsson 2004).

Born globals are becoming more and more common in the respective economies. For instance, in Australia 20% of national growth in 1990s came from born global SMEs. (Rennie 1993) Born globals are behaving differently and using different strategies than older and earlier internationalized companies. Financial and managerial challenges are also exceptional large for many born globals. (Luostarinen & Gabrielsson 2002)

As said in the previous chapter, born globals are companies that have exceptional strategies for entering foreign markets. They seem to internationalize very rapidly. An even more interesting feature of born globals is the fact that they can start operating outside home markets before starting operations at home. (Ibidem) They don't necessarily use Luostarinen's traditional internationalization pattern: nimos-dimos-nipos-dipos (Luostarinen 1979) and if they do use it, they go through phases faster.

Based on historical analyses and pilot studies Gabrielsson and Luostarinen divided born globals into two different groups: early or pioneering born globals and present born globals. Pioneering born globals started their business before the year 1985 with a very short domestic stage of operations or even without any. There were only a few companies that could be considered to be pioneering born globals, such as Vaisala Corporation. That is altogether 0.2% from the whole population of the Finnish 4000 firms. The present born globals are obviously firms that have been founded since 1985 and started to globalize their operations from very beginning with a short or even a non-existing domestic stage. About four percent of Finnish 4000 firms are seen as born globals, i.e. 160 firms. Companies such Biohit and F-Secure are seen as present born global companies. (Luostarinen & Gabrielsson 2002) However, this study concentrates only on present born globals because of the depth of the study.

The internationalization of born globals is divided into four stages. Below is a list of these stages and their features:

- Establishment stage: born globals are mainly established after 1990, thus born globals are much younger than traditional internationalizing or globalizing firms. The vision of being global is present from the beginning and the growth targets are much more ambitious than for traditionals. Their finance, global market know-how, R&D know-how requirements as well as global management skills are much bigger in the beginning than for traditionals.
- Domestic stage: In the traditional companies this stage is relatively long but for the born globals this stage takes only from one to 24 months - sometimes this stage doesn't even exist.
- Internationalization stage: born global strategies are based on the inception of a global business where traditionals have, after the domestic stage, concentrated on gaining revenues internationally. That is the reason why the born globals' strategies differ from those in scale and scope.
- Globalization stage: Because of highly specialized niche type products born globals face stronger push and pull forces than traditionals. Therefore, timing, speed, and rhythm are extremely important for globalizing born globals in order to succeed. (Luostarinen & Gabrielsson 2002)

In addition to this, and to be more accurate in terms of numbers, Gabrielsson has given the study a table of different stages of born globals' globalization. It differs slightly from the one above, but is not in conflict with it. It is also more relevant for the study. The table is below. The internationalization degree means the percentage of foreign sales and the degree globalization means the percentage of sales outside home continent.

Chart 10 Stages of Born Global Globalization

Stage	Degree of Internationalization	Degree of globalization	Global vision	Profits
Mature stage	>50% degree	>50%	Yes	International/Global
Growth stage		>25%		
Development stage		0-25%		
Starting stage	>25% degree	0-25%		
Entry stage	0-25% degree	0-25% degree		
Domestic stage	Not abroad			Domestic
R&D stage				No revenues

(Luostarinen & Gabrielsson 2002)

2.2.2.1 Strategies

Born globals differ from common SMEs by their strategies. By using Prof. Luostarinen's POM$ICA model the differences come up. POM$ICA model is an updated version from Luostarinen's previous POM model. The letters come from product, operation, market, pricing, intermediate, customer and advertisement. These are the elements that should be taken into consideration according Prof. Luostarinen's studies. (Luostarinen 1979 & 2002)

Differences can be best illustrated in a two-column list (below)

Chart 11 Differences between SMEs and Born Globals in Strategy

	Common SME	Born Global
Product	Start internationalizing by selling physical goods	Start from high end such as services, know-how or systems
Operation	They use common	Reverse the order, pass

	NIMOS-DIMOS-NIPOS-DIPOS[14] order in internationalization	some stages, come back few steps etc.
Market	Move to close markets in terms of physical distance	Go straight to lead markets in terms of market potential
Pri$ing	Cost based	Customer-value based
Intermediate	Start with a sales agent	Move fast to multiple channels
Customers	Try to reach any customers	Move to high-end customers
Advertisement	Don't have a pressure (first) to develop strong brand	Create the brand from the beginning

(Ibidem)

2.2.2.2 *Industries*

To answer where the born globals are, Professors Luostarinen and Gabrielsson have looked special features around the born global industries. Pilot studies indicate that born globals are mainly in niche types of businesses where their products are unique, have a high R&D content and demand high-level management and marketing skills. (Luostarinen & Gabrielsson 2002) Pilot studies usually refer to the born global industry only as high technology, but born globals are also met in four other business areas, i.e. high technology, high service, high know-how, high system, and high design (Kirpalani & Luostarinen 1999).

2.2.2.2.1 High Technology

Alahuhta defines a High Technology Company by five different characteristics. 1. The R&D expenditure is more than 5% of sales 2. Most R&D expenditure goes into product development instead of development of manufacturing processes 3. Company produces

[14] Non Investment Marketing Operation Strategy → … → Direct Investment Production Operation Strategy

highly advanced products designed for narrow segment 4. Company has a high share of educated employees 5. Company is relatively young. (Alahuhta 1990) In this study a high technology firm is seen as a company that produces physical and technical goods that demand high technical know-how, e.g. computer or phone manufacturers.

Junkkari has written her thesis for FIBOs Born Global project about high technology manufacturers and their globalization strategies. She argues that managers of high technology SMEs should pay attention to the areas of niche strategy, shortening product life cycle, use innovative ways to supplement limited resources and to rapidly reach a global scale, brand management and training personnel. (Junkkari 2000)

2.2.2.2.2 High Service

High, in this context, means simply an advanced or developed state, which is especially complex or powerful by nature. “A high quality service producer stands out of the crowd of producers or operates in a special segment or niche.” (Rinkinen 2000)

Services are characterized by five characteristics that separate them from physical products:

- Intangibility means that the product is something the customer cannot touch
- Inseparability means that the customer cannot separate different products from each other
- Perishability means that when the service is consumed it disappears
- Variability means that the service is never exactly same and
- Ownership of the product doesn’t change during the consumption process

(Majkgård & Deo Sharma 1998) For instance, consultants are seen in this study as high service providers.

Rinkinen’s (2000) suggestions for managerial implications are that high service born global should take an advantage over Finland’s leading market position, e.g. in the mobile communication segment and managers of that born global should try to differentiate their services from other rivals. Instead of concentrating on a large MNE market segment, it is more profitable for a small born global to concentrate on a market niche. Cooperation is a vital part for high service born globals, because then it is possible to utilize the scarce resources more efficiently. Capital attraction is crucial for SMEs and even more to born globals, as they need more funding than domestic rivals. Therefore one crucial element of management of high service born globals is to keep financers in. Finally, under limited resources a high service born global should pay close attention to the investment order of globalization.

2.2.2.2.3 High Know-How

"High Know-how is always a unique, specific know-how that is protected with a trademark or patent, thus creating the core competence of the firm. Licensable technological know-how in form of programs etc. is usually the most valuable asset to those companies belonging to the high know-how company grouping." (Teimonen 2001) For instance, programmers and software producers are seen as high know-how companies.

Teimonen's managerial implications are that firms should be able to concentrate on the niche segment in order to be able to compete successfully. Invest constantly in innovation, and form strategic partnerships with customers. Managers in these born globals should have a global mindset, outward orientation and innovative attitude. Managers should also pay constant attention to increasing the level of know-how of the employees. Furthermore, Teimonen suggests that high know-how born globals should create strong brands in order to gain profitability. (Ibidem)

2.2.2.2.4 High Systems

Luostarinen (1979) argues that system as a sales object of industrial company is defined as consisting of the following elements:

- Physical goods like components, equipment, machines, materials and structures
- Know-how needed to solve a specific customer system need
- System-specific services, i.e. planning, project management, system integration, installation, maintenance and/or training.

Industrial systems can be divided in three groups. Tailor-made systems are highly customized solutions designed specifically to meet the particular need of customer. Application systems are group specific systems that are directed to a group of customers. Generic systems are functionally specific generic solutions directed to several customer segments with a great degree of standardisation. (Kosonen 1990)

Konttinen (2001) suggests as managerial implications:

- Consideration to the relation between technology and firm performance
- More global networks in another sense than just marketing and sales
- Service aspect of the system should be considered carefully from a customers' point of view
- Managers should develop a competitive supply chain, and
- Competitive brand should be created

2.3 Entrepreneurial Start-up Literature

In this chapter the study covers entrepreneurial literature. First it discusses the challenges of SMEs, then about previous studies concerning reasons for bankruptcy and finally the success factors of SME. The challenges of entrepreneurs can be fatal if they are not satisfactorily solved. Therefore, they set a ground for understanding difficulties in small born globals. Previous bankruptcy theories are necessary for understanding previous academic work in the field. Those results can be referred to the results of this study; however, literature on the subject is scarce and quite old. Lastly, the chapter will discuss the success factors of SMEs. The absence of these elements might explain the unsuccessful business, i.e. failures.

Entrepreneurial literature has dealt widely with the challenges and problems of small and medium sized businesses. In 1990 the Cranfield School of Management conducted a study about the key problems perceived by prospectors. The study's key finding was that the most challenging problem was keeping and finding key staff with an exception of the smallest companies in the sample. These findings were also supported by 1991 study. The results are in the table below: (Barrow 1993)

Chart 12 Problems in Small Business 1990 Study

No. Employees	Employing staff	Finding customers	Raising new finance	High interest rates	Dealing with red tape
5 or less	56%	44%	50%	50%	38%
6-10	100%	30%	40%	20%	10%
11-20	86%	48%	33%	10%	10%
21-80	75%	84%	5%	16%	16%
80 or more	92%	58%	17%	17%	17%
Total	83%	59%	31%	27%	21%

(Barrow 1990)

The 1991 Study revealed similar challenges for SMEs. In order of importance:

1. Competition
2. Recruiting retaining employees
3. Management succession
4. New product development
5. Investments in new premises and equipment
6. Raising capital
7. Environment considerations
8. Single European market
9. Family Succession

(Coopers & Lybrant 1991 cite Barrow 1993[15])

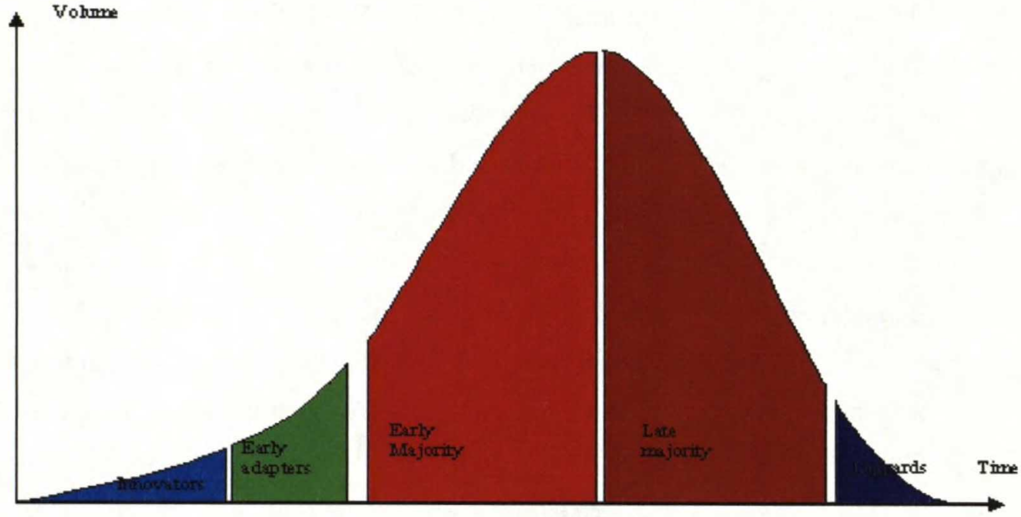
One important element for understanding business growth and its challenges is the adaptation life cycle. It explains how the market of a high tech company evolves from the beginning to the end. In the first phase innovators purchase the products. According to this model they pursue new technology products aggressively. They sometimes seek them even before formal marketing actions are conducted. Technology is a central interest in their lives. The market potential of innovators is small, but winning them proves that the product actually works. Early adapters are quite similar group in

[15] Barrows (1993) reference didn't reveal the correct source of information, however, the listing is so significant for the study that it had to be referred.

reference to innovators. They buy technology early in its life cycle but as a distinction they are not technologist. They are people who find it easy to imagine, understand, and appreciate the benefits of a new technology, and to relate these potential benefits to their other concerns. The early majority share some of the early adapters' ability to relate to technology, but ultimately they are driven by a strong sense of practicality. They postpone their purchase decisions to limit to understand better how other people are making out before they buy. Well-argued references are what they need to make the decision. The late majority shares all the concerns of early majority, but still one major concern in addition. Whereas the early majority is accustomed to utilizing new technology the late majority is not. They want to wait until the technology is a standard and even then they want to see lots of support and tend to buy from a large, well-established, company. Finally, the laggards are the group of buyers that simply don't want anything to do with technology for variety of reasons. Those could be either economical or technological. Laggards for these obvious reasons are considered not to be worth pursuing. (Moore 1998)

This profile (see chart 11 Revised Technology Adaptation Cycle below) of product adaptation is the very foundation of the high-tech marketing model. In this model one should work the curve left to right, focusing firstly on innovators, growing that market, secondly on adopters, growing that market etc. In other words, the company should first capture one group before moving to other. The fundamental idea of this strategy is to keep the process moving smoothly, proceeding "like the baton in a relay race". It is vital to maintain momentum in order to create a bandwagon effect that makes it natural for the next group to want to buy in. The second idea of this strategy is to keep ahead of new emerging technology. A notable feature of this high-tech marketing model is that if one gets the virtual monopoly over market development first and rides up through the early majority segment, and de facto establishes a new technology standard, one can create wealth beyond rich very quickly and "own" a highly profitable market for a very long time to come. (Moore 1998)

Chart 13 Revised Technology Adaptation Cycle



(Ibidem)

As the picture illustrates there are cracks in the line between different customer groups. The first crack is a gap that occurs when a hot technology product cannot be readily translated into a major new benefit. The enthusiasts love the product but no one else can even figure out how to start using it. A crack of the same magnitude is between the early and late majorities. The crack is in the point where the market is already quite well developed and the technology is absorbed in the mainstream. The focus in this phase is to develop end-user competence and develop the technology into a more user-friendly form. However, for small born globals more important than these two cracks is the huge chasm between early adapters and the early majority. Whereas an early adapter is more likely to buy the change agent to be the first in competition to adapt this advantage and expect a radical discontinuity between old ways and new ways of doing things, the early majority will only buy a productivity improvement for existing operations. They are seeking to minimize the discontinuity between old and new. (Ibidem)

Moore (1998) writes, in addition to paragraphs above, a strategy with six phases on how to come out as a winner in crossing chasm[16]. In the context of this study, however, those are not relevant. It was crucial to understand the existence of such chasm and how this could affect small born global companies. It is clearly a reason why the optimistic future prospect didn't become true.

Challenges alone don't answer why small businesses fail. Clegg and Barrow (1984) list eleven most common reasons for business failures. Those are:

1. <u>Lack of Expertise</u>. Starting a green field business requires significant versatility. Especially people with history in large companies find it difficult to cope with all the tasks that are needed for running business.
2. <u>No product or marketing strategy.</u> Until one has defined what to sell to whom the business is doomed to fail.

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[16] Those phases are D-Day Analogy, Target the Point of Attack, Assemble the Invasion Force, Define the Battle, Launch the Invasion, Leaving the Chasm behind.

3. Over-optimism about the market size. It is a common misconception to believe that people are only waiting to be sold something to.
4. Underestimating the start-up time. There's often a great deal to be done before customers come along. Growing stocks, premises, equipment swallow capital - and there are no sales to cover. One should estimate the start-up time, double it and add even some more to be realistic.
5. Lack of working capital. If there are mistakes made in stages 3 and 4 one could easily run out of money. Well-designed cash-flow forecast is crucial for start-up businesses.
6. Start-up costs are too high. A new business has to be lean and mean. One should not spend too much on fixtures, fittings and equipment too soon.
7. Consequences of early growth. One could easily assume that the problems are over once the customers start rolling in. As sales grow one needs increasing sums of working capital to fuel that growth.
8. Mistaking cash for profit. The cash that flows into the business hasn't gone through the deductions that are necessary. Taxes and insurances are surprisingly often forgotten.
9. Wrong location. The relation between your business location and the rent level is a vital element on concluding how profitable your business really is.
10. Selecting and managing people. Big companies can make mistakes, but hiring and firing people in small companies is too expensive. A small business doesn't afford mistakes.
11. No management accounts. New business people often see regular accounting as bureaucratic dealing with red tape. For this reason cash crisis sometimes takes the entrepreneur by the surprise.

(Clegg & Barrow 1984) The listing is useful and outstandingly relevant for the context of this study; however, it is quite old. It doesn't explain special features regarding born globals or competition in a more open economy that it was in the 80s. The study was conducted in the UK, which is truly different from Finland from 90s to early 20th century. This study will have a closer and deeper look on factors that are absent from their study.

For a company's success factors Lahti (1991) has developed a model. According to him the good success model should be broad, organized, and strong in academic theory and direct the entrepreneur towards future. Necessary elements are:

1. Success is ultimately measured by results
2. External effectiveness and internal efficiency are interrelated
3. Effectiveness and efficiency complement each other
4. Strategic marketing and logistics are seen as a potential source of competitive advantages
5. Synergy and resources
6. Focus

These elements can be seen in the chart below:

Chart 14 Success elements of a company

	Potentiality		Realisation		Result		
Positioning	Scale		Strategic marketing		External Effectiveness		Substance value
Vitality		Synergy		Competitive advantage		Profitability Flexibility	Market Value
Logistics	Resources		Logistic functions		Internal efficiency		Goodwill value

(Ibidem with addition from Lahti 1999 in the most right hand column)

In the context of this study Lahti's (1991) success elements seem to be realistic. The born globals of this study seem to lack potentiality in both scale and resources. Therefore they also lacked competitive vitality and advantages. Profitability was only a vision for these companies.

For a more sophisticated quantitative method of analyzing success of SMEs, Lahti (1995) developed an advanced model for analysis. In spite of its challenges the results are interesting. First it defines management success components to be analyzed 1) Strategic management – Marketing opportunities, 2) Operational management – Performance and 3) Result management – Results. Elements to be monitored in strategic management are target market, synergy, know-how and resources. In the operational management the elements measured are marketing, competitive advantages and logistics. Finally in result management the focus is on effectiveness, economic success and efficiency. On the other axis there are types of entrepreneurs: first craftsman, then expansionistic entrepreneur, managerial company, positionistic entrepreneur and opportunistic entrepreneur. The craftsman is typically an owner-entrepreneur who has low economic performance but high social satisfaction from work. The expansionistic entrepreneur is looking for a more solid base than mere capacity of selling. The managerial company is controlled by a management team. Shifts between operational management and strategic management are flexible in this type of company. The positionistic entrepreneur focuses on developing unique product offerings to markets. In this type of company the critical resource is the entrepreneur herself, with her unique foresights of business. The opportunistic entrepreneur succeeds with market-based inventions. There is always a risk that her innovative products and processes are not mature enough for the markets. (Lahti 1995)

Positionistic entrepreneurs are the market winners. They are aggressive in their marketing and, moreover, innovative at the same time. The open markets offer them huge prospects for further differentiation of products and expansion. In Lahti's analysis these entrepreneurs even beat managerial-driven companies in marketing opportunities and strategic marketing. Even though the result management and operative management are slightly weaker than what management driven companies have, overall the advantage is on the positionistic entrepreneur's side. (Ibidem) This result is in line with born global studies. Success should be based on deep focus and strong positioning of the products, globally. As seen later in chapter 6.1 a lack of focus, i.e. unclear focus, is one of the fatal reasons behind born global bankruptcies.

Because of lacking resources Lahti (1999) sees that networking and network organizations as the way how small businesses should develop their competitive advantages. By employing networks efficiently they can increase the scale and establish a niche. Moreover, they can get access to scarce resources. According to his study this new type of doing business will revolutionize the old-fashioned growth by clustering.

The basis of this argument is deployment of new technologies. (Ibidem) Reach-U solutions was based on this ideology of building a large networking cluster around a core. In a deeper analysis of its unit NetBeacon revealed that the network didn't function as well as the theory implies. The central organization was forever changing, and this developing cluster failed. If the cells could have survived in Lahti's type of networking community of SMEs needs further studies. However, interviews revealed that the founders of NetBeacon themselves were convinced about their prospects of success.

A company risk is a sum of the risks involved in the business. Those risks are, among others, currency fluctuation risk, stock market risk, account risk of customers and even health risk of key employees. In other words, a company risk is the same as the likelihood of the business ending in bankruptcy or similar. A company could sometimes unconsciously increase the risk by selling for credit to risky customers. In some cases a default in payment might destroy the whole business. (Laitinen & Laitinen 1994)

A risk company is a company with a high company risk. In this case the economical conditions of activity have decreased so heavily that the continuance of business is unlikely. This could be seen as defaults in payments, furloughs or difficulties in making deliveries. However, some bankruptcies come as a surprise to the interest groups as the company has been able to perform perfectly to the point of bankruptcy. (Ibidem)

Small companies are statistically more vulnerable. Over a half of all the companies that bankrupted in Finland in year 1993 had only one employee. Companies that had ten or less employees formed 87% from the total population and fifty or less formed already 99% from the population. Moreover, young companies tend to die easier. From this survey over three fourths were under ten years old. In addition to these risk indicators Laitinen & Laitinen (1994) count location and industry. (Ibidem) However, those are covered differently in born global studies and thus this study will keep up with tradition.

As a reason for bankruptcy Laitinen & Laitinen (1994) saw most of all weak management. The bankruptcy development could start from an individual event, however, there is usually a more comprehensive set of events behind. They refer to previous studies and argue that literature has not been able to identify how many reasons are needed for bankruptcy. In addition to that they claim that literature has not been able to implement the list of reasons for bankruptcy prediction.

LTT's (Liiketalouden tutkimuslaitos) study lists for eight reasons for bankruptcy. Those are: 1) finance, 2) R&D and marketing, 3) costs, 4) investments, 5) family business, 6) management, 7) accounting and 8) clearance operations. (LTT 1978 and Prihti 1980) That study is in line with Argenti's study (1983) where he valuates every reason with numbers and every company can be rated with this alleged a-score. The model adds up to 100 points and if a company gets over 25 from the whole model it has to be considered to be risky. Argenti 1983)

2.4 Finance Literature

The review about venture capital literature will use John Cochrane's working paper as a basis for further analysis. Cochrane (2001) writes about the problem of overcoming selection bias that is seen as a central hurdle for venture capitalists, which try to evaluate different types of companies. This is relevant for the study while the most of the born globals studied are partly financed by venture capital.

Cochrane (2001) lists in his introduction chapter three issues, which face the investors in the decision-making process. Firstly, investors may require a higher average return to compensate for the illiquidity of private investment. Secondly, poor diversification of investment is an issue for investors, while private equity is usually held in large chunks. Each investment is likely to represent a sizeable fraction of the average investors' wealth. Lastly, he presents an issue of information and monitoring. Relations between the start-up and the venture capitalists are not purely financial. The venture capitalists often sit in the board of directors and appoint or fire managers and bring in experience that may lack from the target company. As a reward from these actions venture capitalists may get higher measured financial return.

Cochrane (Ibidem) provides several findings about venture capital markets by quantitative analysis from VentureOne database. The database is formed from a collection of information on financing rounds that include at least one venture capital firm with more than $20 million assets under management.

One of the central arguments of Cochrane's paper is that companies are more likely to go public after receiving good returns. Still all the estimates that don't take into consideration the selection bias tend to be over optimistic. Without a selection bias correction he finds a mean log return about 100% and a log CAPM intercept of 90%. With correction the numbers are more reasonable 7% and –2% intercept. Still the returns are very volatile with a standard deviation of 100%. With a selection bias correction the arithmetic average returns are about 53% with CAPM intercept 45%. Second, third, and fourth (etc.) financing rounds carry less risk. He argues that because their progressively lower volatility they have lower arithmetic returns. Betas of financing rounds are sunk from the 1 of the first round to near 0 of fourth round.

To avoid bankruptcies in entrepreneurial financing the study refers to a paper by Ebrahim and Mathur (2000). Their assumptions are valid when risk aversion and general is assumed equilibrium. They claim that risk aversion in financing results a unique interior debt ratio for both the tax and no tax situations contrary to tax hypothesis of capital structure[17]. Marginal rate of substitution for agents adjust to account for differences in borrowing and lending rates. Homogeneity of wealth between borrowers and lenders results in a debt ratio close to fifty percent. Risky debt is priced in equilibrium. Risk-free and risky loans are two distinct contracts whose equilibrium requires satisfaction of necessary and sufficient conditions for each. Preferred stock and income bond can play a role in the ownership structure of a private firm if they are found to be pareto-optimal. (Ebrahim & Mathur 2000)

Huyghebaert et al. (2000) have done a research on whether some start-ups are more likely to fail than others. Failed firms have difficulties in generating cash flows in the

[17] Hypothesis of capital structure in linear models, where no bankruptcy possibility is taken into consideration, lead in the tax situation to a solution where the whole capital is in debt.

first year and at same time they are faced with higher labour expenses. To compensate for the liquidity problems they use trade credit granted by suppliers more extensively and limit inventories. Despite that failed new firms are likely to obtain more of their funds from creditors when compared to non-failed firms. Liquidity constraint is the strongest reason behind Belgium post entry failures. "The probability of a new firm failure can be reduced by making the entry of lemons more expensive to the entrepreneurs themselves." The result of that study shows that even though failed firms and non-failures do not differ in terms of equity financing, failed firms tend to have more bank debt. For the government of Belgium Huyghebaert et al. suggest costs in income taxes in order to reduce labour costs of start-ups. They argue that this could decrease the number of failures significantly. (Huyghebaert et al. 2000)

Jayaraman, Sabherwal and Shrikhande (2001) have studied the impact of financial distress, the bankruptcy code and related procedures on the long-term performance of two companies: Columbia Gas System and Metallgesellschaft that were engaged in similar businesses in two different countries. Both companies were driven to bankruptcy as a result of unanticipated changes in energy prices. For the US firm the bankruptcy resolution court took four and half years whereas for the German company it took only two weeks. The conclusion behind is that in the US information asymmetries between shareholders and debtors are bigger than in Germany. The longer bankruptcy procedure harmed post bankruptcy performance in terms of reorganization and business development. However, the American company did better after a while than the German company. Authors argue that this is because of the US firm had suffered from financial distress (Micro environment);[18] on the contrary the German firm had suffered more from economic distress (Macro environment). This indicates that: "(...) if the country specific bankruptcy code allows for bankruptcy resolution times consistent with level of asymmetry of information between debt holders and share holders, then long term, they do not necessarily affect the post-bankruptcy performance of financially distressed firm". (Jayaraman, Sabherwal & Shrikhande 2001)

[18] Remark of the study

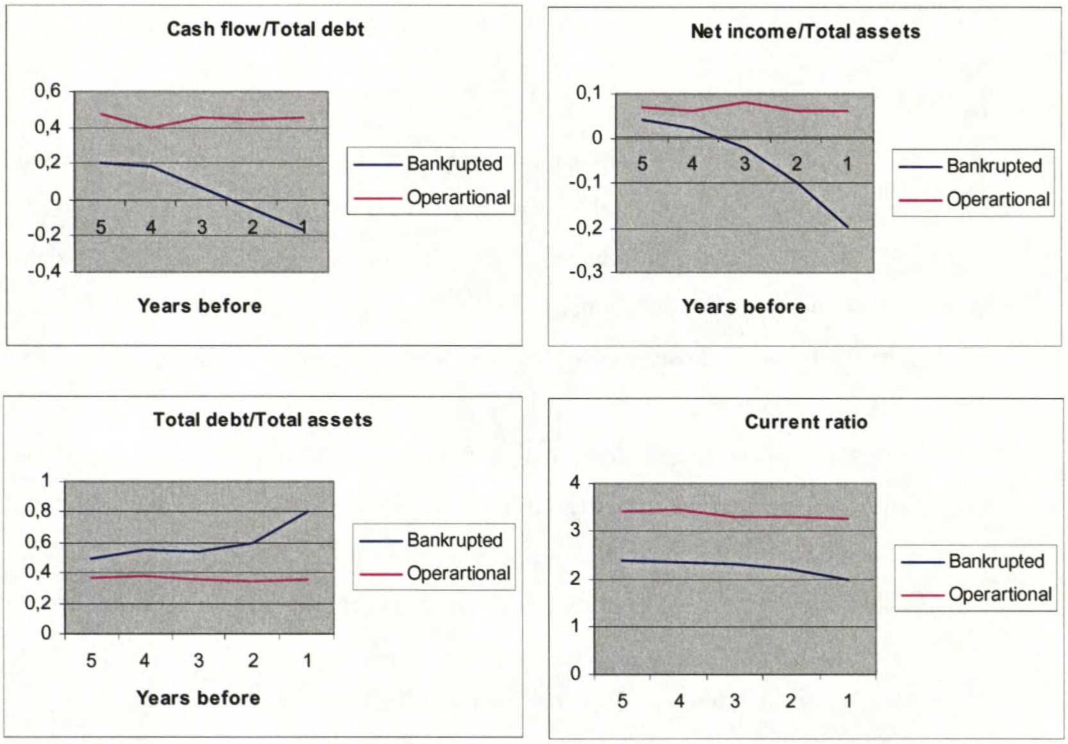
Philosophov & Philosophov (2002) argue that a correct formulation of bankruptcy prognosis must give an indication of the time interval within which the bankruptcies will occur. By comparing various financial indices based on data from accounting, they have been able to identify four factors that have significant potential in bankruptcy prognosis. Two of those characterize the quantity and quality of corporate debt, while the other two reflect the firm's ability to pay the debt. "If the time intervals are taken into account in the bankruptcy prognosis, the prognostic problem is transformed into a multi-alternative problem of statistical decision theory." (Philosophov & Philosophov 2002)

"The Finnish bankruptcy code prior to 1993, when a reorganization law was enacted, was a creditor-orientated code under which bankrupted firms were either sold as going concerns or were liquidated piecemeal. (...) Likelihood of liquidation depends on firm characteristics. To control such factors, we ran a logit regression on a sample consisting of 72 Finnish firms and a comparable number of US firms (...) The code coefficient had a predicted sign, but the effect was not significant statistically. Firm size and the type of business were significant determinants of the likelihood of liquidation for the combined sample." (Ravid & Sundgren 1998)

Beaver (1966) studied the account information's ability to predict bankruptcy. The study covered in total 29 figures and 148 companies of which 79 were bankrupted and 79 were still operational. In the estimation group the critical values for each figure were counted so that the total error was minimized (type one + type two errors)[19]. Each figure was then tested in a prediction group of the research. Below is a chart explaining the key differences.

[19] Type one error: bankrupted company is categorized as functional
Type two error: functional company is categorized as bankrupted

Chart 15 Prediction from accounting



(Beaver 1966)

Altman (1968) upgraded Beavers model by taking multiple figures in consideration at the same time. As a sample he used 33 bankrupted and 33 functional corporations. In his analyses there were initially 22 figures, which could be divided in five separate groups. Those groups were 1) liquidity, 2) profitability, 3) leverage, 4) solvency, and 5) activity. In the final model five were selected, based on their ability to separate functional companies from bankrupted ones. Final function formed as follows:

$Z{=}.013X_1{+}.014X_2{+}.033X_3{+}.006X_4{+}999X_5$

…where

$Z_{critical}=2.675$

X_1= Working Capital/Total Assets

X_2=Retained earnings/Total assets

X_3=Earnings before interest and taxes/Total assets

X_4=Market value of equity/Book value of total debt

X_5=Sales/Total assets

(Altman 1968)

The model was designed only for listed industrial companies, Z' version was estimated for smaller companies. In that model X_4 variable had a book value instead of a market value. A Z'' version was also introduced for service sector companies where X_5 variable was left out. (Ibidem) Later the new better ZETA™ model was introduced. It had seven variables, but weights for those or other features were not introduced (for commercial reasons). Its variables were:

1. Profitability – Earnings before interest and taxes/Total assets
2. Risk – Normalized measure of standard error of estimate around a ten year-trend of Earnings before interest and taxes/Total assets
3. Paying of debt ability – Earnings before interests and taxes/Total interest payments
4. Cumulative profitability – Retained earnings/Total assets
5. Liquidity – Current ratio
6. Capital adequacy – Five year average of market value of equity/Five year average of market value of total capital
7. Size – Total assets

(Altman et. al. 1977) Improvements in ZETA™ model were significant in terms of smaller error figures. Adjusting the accounting mainly caused those corrections. For instance, external leasing contracts were added to balance, and activation of R&D, interest etc. expenditure was marked as costs in income statement.

The first Finnish researcher to cover that was Prihti (1975). This study was significant and it has been used widely to backup the credit decisions in banks in Finland. The study had only three theoretically chosen figures, but still it was quite accurate.

- First (X_1) was revenue surplus deducted by taxes and the whole divided by the whole book capital, after this operation the number was multiplied by hundred.

- Second figure (X_2) is quick ration divided by whole book capital and that is multiplied by hundred.
- Third figure (X_3) is necessary because the line between a basic loan requirement and an additional loan requirement is flickering. It is simply debt divided by whole book capital.

(Prihti 1975)

These equations were tested with 90 Finnish companies from which 31 were bankrupted. Estimation gave a dividing function:
$Z=.049X_1+.021X_2-.048X_3$, where $Z_{critical} = -4.55$
(Ibidem)

One of newer studies revealed that the function was not so accurate in the late eighties. The weights were updated based on a new study conducted with the material collected from annual reports 1986-1989. In this study the result was:
$Z=.016X_1+.042X_2-.085X_3$, where $Z_{critical} = -8.105$
(Laitinen 1990)

However, even more accurate results gave the function:
$Z=1.88X_1+10.13X_2-.013X_3+.51X_4-.32X_5$,
where $Z_{critical}= -7.0$
X_1= Income before extraordinary items
X_2=Quick ratio
X_3=Pay back period of accounts payable
X_4=Solvency ratio
X_5=Turnover growth rate
(Ibidem)

The problem of these models is that they assume that companies behave similarly when approaching a bankruptcy. However, this is not the case. (Kinnunen 2003) Laitinen's study (1990) indicated that there are three types of bankruptcy companies:

1. Chronic bankruptcy company (33%)

2. Income bankruptcy company (28%)
3. Acute bankruptcy company (40%)

In this material the first group has a severe and long-term disease, from which it suffers. The indicators work accurately and the bankruptcy can be predicted long before the actual bankruptcy. The second group of companies can hide their problems for even two years before bankruptcy. In this group the profitability and revenue creation nosedives fast. The third group is the most problematic for bankruptcy predictions. Acute bankruptcy companies don't indicate any worrying signs in their income statements, but all the indicators fall rapidly during the year before actual bankruptcy. (Ibidem)

2.5 Legal Issues in Bankruptcies

For differences in bankruptcies one should know what a bankruptcy really is. From a legal point of view bankruptcy is a process. This process in Finland has 18 steps, of which 10 are mandatory. Lo chart below.

Chart 16 Bankruptcy process

Bankruptcy application of obligee	(or)	Bankruptcy application of obligator
	Comprehension	
	Transfer to court	
		Request for comment to obligators
		Obligee's comment
		Decision to transfer to court and invitation
	Adjudication in bankruptcy	
	Invitations to debtor hearing	
	Debtor hearing	
	Additional debtor hearing	
	Public notice	
	Assignee sends information about the public notice to	

	debtors	
Securing claims with the assignee		Securing in the court
		Securing diaries to assignee
	Assignee collects the schedule of secured claims	
	Disputing to court	
		Disputing hearings
	Bankruptcy verdict	

(Könkkölä & Liukkonen 1995)

The bankruptcy application obligee means that a company is willing to give its possessions to bankruptcy. In this case there is no obligation to do so, but in some cases a delay in the process might harm the position of debtors, and then it is punishable by the court. One reason for this situation to form is when a limited company is unprofitable for a long time and its equity is less than half of the capital stock. (Pinomaa 1993)

If the debtor can apply a company into bankruptcy it has to have a so-called bankruptcy claim. This is a claim, which is an actionable, monetary claim that is approved by the justice order or a claim that can be transferred into monetary terms. In addition to those it has to be in accord, meaning that the obligee agrees on the claim, the court has approved the claim, the claim is base on acceptance, it is based on an unilateral act, the claim is under a law of insurances, or the claim is introduced by taxation officials. For the debtor to apply its debtee in bankruptcy, the actions of the company have to fulfil the requirements of 5^{th}§ and 6^{th}§ of Finnish bankruptcy law. The fifth paragraph gives the right to apply for bankruptcy for the debtor, which has a claim in accord, if debtee hides or absconds. The sixth paragraph gives the right if other debtors have asked for the assets of the debtee distraint, the debtee looses or hides its assets, the distraint has lacked assets, or an eight day demand of payment has been given to the merchant. (Ibidem)

The court decides on the adjudication to bankruptcy. Because the time of adjudication decides what is in the bankruptcy state the court order has to be recorded on the accuracy of one minute. In addition to adjudication decision the court moves the handling to a debtors' meeting, which is held in court usually two weeks from the adjudication. The court also invites the debtee and his/hers spouse to the hearing and points an assignee for the bankruptcy state. The assignee calls the debtor hearing in order. The hearing has eight stages: 1) opening, 2) coming to order, 3) ascertain of attendances and their claims, 4) ascertain of legitimacy, 5) approval of agenda, 6) actual hearing issues, 7) other issues and 8) hearing closure. After the debtors' hearings the assignee makes a public notice of bankruptcy hearings and delivers information of it to the debtors. (Ibidem)

Securing obligations bind the debtors to list their claims accurately from the bankruptcy state. If this obligation is neglected, they might loose the right of the assets of bankruptcy state. Securing obligation includes all the receivables, even those that are optional or otherwise unclear. Whether the claim has to be secured depends on the beginning claim. If the claim is originated before bankruptcy adjudication, it is securely obligated, otherwise it is counted as mass debts. This distinction between mass debts and secure obligated debts is important for debtors to notice, while otherwise they might loose the right to their claim. The mass debt is a priority in list of debts and its debt of bankruptcy state and not bankruptcy debtee. These securings have to be delivered to the assignee and those have to include the amount of receivables and a basis of claim. The assignee then conducts the schedule of secured claims. The disputing of claims is the responsibility of the assignee if he/she notices that claims that are groundless. If any are detected, an additional disputing hearing is organized. (Könkkölä & Liukkonen 1995)

After all disputes (if any) the court may give the bankruptcy verdict. Firstly, the court decides on securing claims that are not investigated or desolated. Secondly, the verdict states which claims remain disputed. Thirdly, the bankruptcy verdict states which claims are to be paid. Fourthly, the verdict decides on the priority rights of each claim. Lastly, the verdicts states, which are the lastly paid claims, which will be compensated only if there is something to be paid after the higher priorities, have received full compensation (e.g. stock capital). (Ibidem)

As an option for bankruptcy the debtee or debtor can pursue a debt restructuring. This would ensure the continuance of business and it is a debtee friendlier alternative than a bankruptcy. In the process the court approves a program, in which the handling of the company's assets and debts are decided. According to the Finnish law both the debtor and the debtee can sue the restructuring of debts. A ground for debt restructuring is that the debtee and two debtors, who possess at least one fifth of known receivables from the company, make an application for the process. The purpose of restructuring of debts is to ensure and strengthen the continuance of the business and thus avoid bankruptcy. (Pinomaa 1993)

2.6 Economics of the Born Global Failure

Next the study will focus on the economics of the entrepreneurship. It is important to notice the dynamics that affect costs, demand and profits. The challenge in analysing born global companies is that they are not on a totally open market. As assumption they possess something unique and therefore face near-monopoly markets for their products. However, the complexity of the product[20] causes limited competition with other types of products and thus the company has just a monopolistic position on the market. This means that the company has entered in the natural monopoly situation, where it doesn't face direct competition. The study uses these assumptions as a basis for future discussion.

First the entrepreneur has to know how his/hers costs behave. The costs can be divided by their behaviour into fixed and variable costs (in accounting). In economics those are quite similar. However, variable costs are seen as marginal costs, which mean the additional cost that is yielded by producing one (marginal) more product. Average costs then have both fixed and variable costs per unit. So both marginal and average costs are a function of production quantity. (Schotter 2001)

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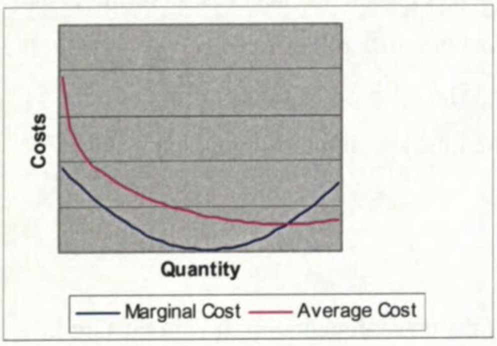
[20] In the most cases the product is said to be unique

$AC = C_{total}(Y) / Y$
$MC = \partial / (\partial C_{total})(Y)$

…where MC = Marginal Cost, AC = Average Cost, C_{total} = Total Cost and Y = Production Quantity. (Ibidem)

Chart 17 Costs



The U-shaped curve of marginal costs is typical. First the products are extremely expensive to produce due to the lack of scale in production. When the scale (in short run) is increased, the marginal cost decreases, while production is more efficient. However, the decrease in marginal cost shrinks and slowly the production meets its maximum efficiency. From there on every additional unit produced costs more to produce, while the capital and labor is pushed further. The average cost per unit is minimized at the point where the marginal cost and average cost equal. The marginal cost might be received as a straight line in short run in some range of quantity. This might be possible, for instance, in highly scalable products such as high know-how software. A whole range of production volume would still reveal similar behavior. (Ibidem)

The next element in defining a company is demand. Demand is a function of price. The lower the price the higher quantity is demanded. Vice versa higher price and a lower quantity are demanded. While it is assumed that a born global faces a near monopoly situation with its unique product, its production increase will lower the price. Thus the marginal revenue curve is steeper than the demand curve. (Ibidem)

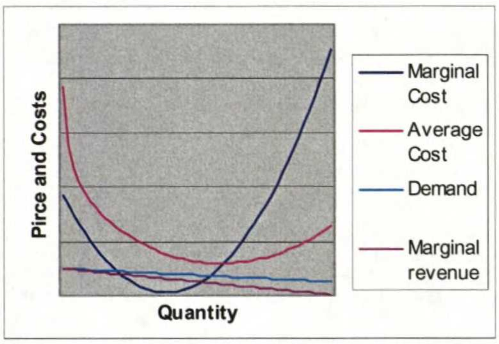
In algorithms one illustrates:

$D = a - bq$
$MR = a - 2bq$

Where D is demand, a and b are constant positive numbers and q is quantity. (Ibidem)

When combining these two elements - marginal costs and marginal revenue, the point of maximum profit is where they are the same. However, for some reason the point could be under average costs, when the whole business is unprofitable in spite of maximum theoretic efficiency. (lo picture below)

Chart 18 Marginal cost and revenue



Even with maximum efficiency this situation will lead to failure. The point of maximum efficiency is the later crossing of marginal revenue and marginal cost. In this point the company sells the quantity on axes below and price of demand curve on that quantity. This, however, is below the average cost of unit. This will eat up the whole capital if the situation continues. (Ibidem) One should note that numbers are selected in a way to illustrate the point. It is possible to work at maximum efficiency economically but still loose money. The situation in the market has to change. That could be done either by shifting the cost curve down or in a more likely scenario, shifting the demand curve up. The demand curve moves up, when new markets are found, new customers reached, etc.

2.7 Literature Criticism

This literature review doesn't satisfy the research problem. In this short chapter the paper will discuss why this is the case. The paragraphs are in the same order in which they appeared initially in the paper.

Chapter 2.1 discussed the strategy literature. Even though this is the basis of all the strategy planning in every company, this broad approach fails to specifically identify reasons for failures. Many of the studies are found on observation of best practice companies, so at best one could argue that failure is caused by absence of one of those success factors.

Chapter 2.2 discussed internationalization literature. This sets the analytical frame where the born globals are identified. Old school internationalization literature doesn't explain the born global phenomenon, while the failures are not covered in later born global studies. The older born global studies might be victims of optimism in the market in the late 1990s and early 2000s. That could be seen in the recommendations to conduct simultaneous market penetrations and hybrid sales channels. These challenging modes might fail as well as succeed.

Chapter 2.3 discussed entrepreneurial start-up literature. This literature offered several explanations for bankruptcies, but this broad discussion seemed to lack the focus needed to explain the born global failures of beginning of 2000.

Finance literature (2.4) discussed financing small companies widely. They offered several indicators to warn financers from approaching a default risk. However, this is not useful from the entrepreneur's point of view. The decision makers also need other type of information than just the fact that they are running out of money.

For the purpose of this study it was important to illustrate the bankruptcy process (2.5). However, that offered scarcely reasons for the bankruptcies. The definition of bankruptcy became evident from those sources.

Finally the paper discussed in chapter 2.6 the economics of the Born Global. The reason for this discussion was to show how one company could operate on a theoretical maximum economical efficiency and at same time be unprofitable. Even though this analysis is unquestionable it fails to give anything more than a static picture of a company's environment. This type of picture doesn't give the management any ideas why they are in a situation like that and how they could get out of it.

3 Findings of the First Part of the Research

As mentioned above, this study was conducted in two parts. The first part concentrated on macro- and meso environmental changes behind the bankruptcies. That study was the researcher's bachelor's thesis and now the research has deepened into a master's thesis. Perhaps an even more valuable finding was the list of fourteen bankrupted companies that were born globals. This is the basis for the deeper analyses of bankruptcies in this group of companies. However, before the second part of the study the findings of that first phase are introduced below.

The research problem of that first phase of the study was to find out the reasons for born global bankruptcies at macro- and meso environmental level. The objective of that study was to contemplate the economic factors that were present in a global environment at times when the born globals failed. The study also tried to find industry level reasons behind failures of born global companies. An interesting question for this study was the distinction between common SMEs in the industries and born globals of that particular field. The following research questions were set for the study:

- When have the born global companies failed in the defined time frame (1995-2002)?
- How old are the born global companies when they fail?
- What are the greatest macro factors behind born global company failures?
- What are the greatest meso factors behind born global company failures?
- What are the distinctions in failures between born global companies and common SMEs?

The study is based on the data survey in the microfilm archive at the National Board of directors of Patents and Registration Finland, which gave, as a result, a list of 14 clearly born global companies. The division into common SMEs and born globals was a challenging task, and some interesting looking companies were left out because of mixed signals about the Global Vision. The Finnish law doesn't demand companies to register their sales by continent, so only few had done so. The Global Vision was recognized from annual reports that gave a picture about the negotiations in different continents, office openings in different continents etc. For older born globals it was inappropriate to use global vision, because of the mature stage of that firm. In that case, only 20% of sales outside the home continent could give a born global status for that company. Other ones are seen as common SMEs in that industry. The companies bankrupted were more common SMEs than born globals because of the prudence principal. Therefore the findings of the born globals are more accurate than perhaps the proportion between SMEs and born globals, while some companies in the SME category could be also born globals.

The statistical analyses aimed at gaining knowledge about when, where, and why born globals fail. The first phase of analyses in this study concentrates on purely statistical information on data collected. As mentioned before, the studies of born globals have come up with the conclusion that the born globals behave differently. Therefore it was vital for the study to investigate if their failing behaviour was different as well. A zero hypothesis in this study assumes there are no distinctions between these different groups. If any are found, those are (as mentioned above) for 95% certainty not a coincidence, i.e. findings are significant.

3.1 How Old Are the Firms That Fail?

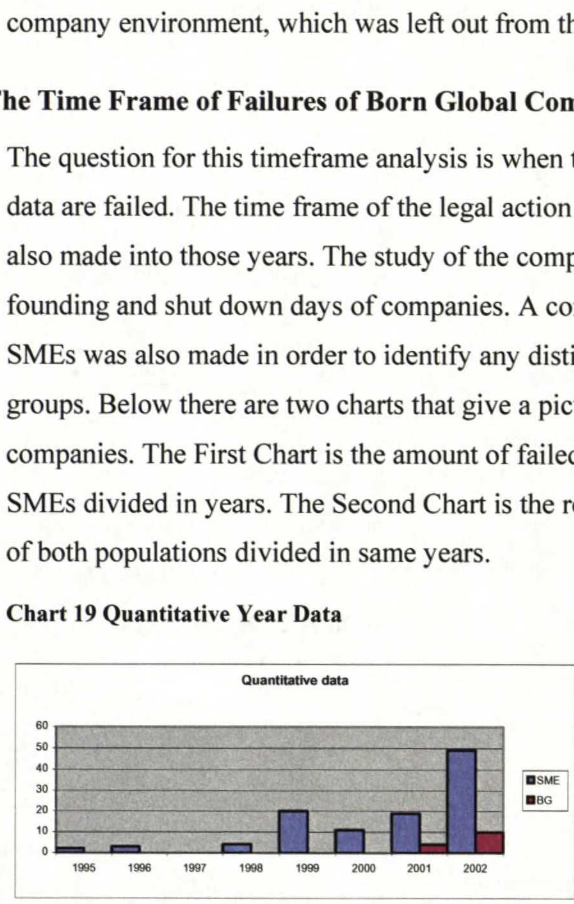
The data analysis about the age of failed firms designates that born globals fail, on average, at the age of 4.5 years. The variation is 5.9 square years or the standard deviation 2.4 years. These results were easy to compare with common SMEs that had an average life span of 5.8 years and a variance of 12.7 square years, i.e. a standard deviation of 3.5 years.

Differences in both average and variance are significant. The result indicates that born globals fail younger than common SMEs on that field. Furthermore, the variance is smaller in the born global group than in the SME. This could be interpreted as a similarity within that group, but that analysis would go deeper in micro level of the company environment, which was left out from the study.

3.2 The Time Frame of Failures of Born Global Companies

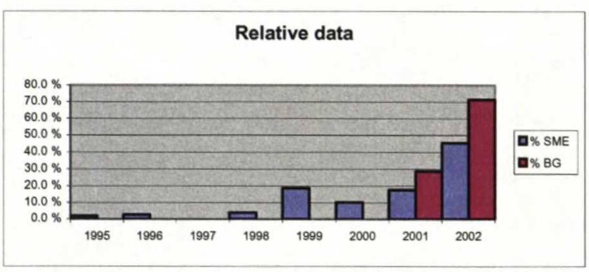
The question for this timeframe analysis is when the born globals and SMEs of study data are failed. The time frame of the legal action is from 1995 to 2002. The division is also made into those years. The study of the company and community register gave the founding and shut down days of companies. A comparison between born globals and SMEs was also made in order to identify any distinctions between those different groups. Below there are two charts that give a picture about the failing years of those companies. The First Chart is the amount of failed companies, both born globals and SMEs divided in years. The Second Chart is the relative percentage of failed companies of both populations divided in same years.

Chart 19 Quantitative Year Data



As this Chart 19 illustrates, a truly surprising finding is that all the born globals identified failed in years 2001 and 2002, although the timeframe was from 1995 to 2002. It raises questions as well as some answers. The study indicates that all the born global failures have happened after year 2001.

Chart 20 Relative Year Data

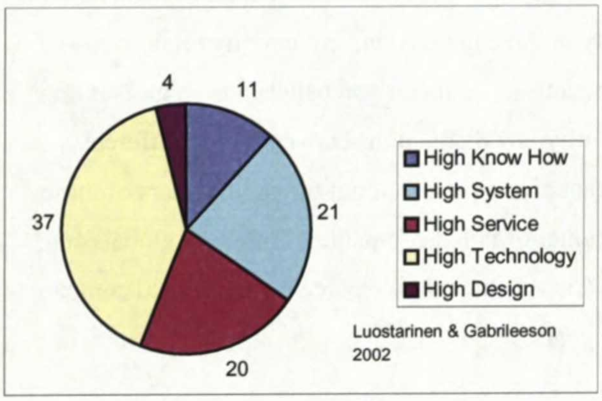


In this Chart the difference between born globals and SMEs comes up. Statistical analyses indicate that for 95% certainty the difference is significant. That can be seen in the Chart where none of the born globals failed in 1999 or 2000 which is in the SME population almost 30%. A smaller percentage would have declined the significance of this finding.

3.3 In What Industry Were the Failed Born Globals?

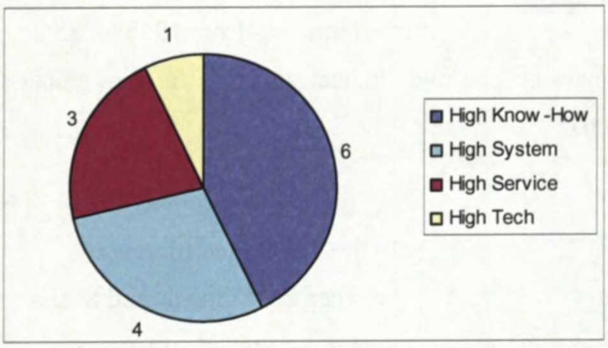
In this study the industry division of the failed companies is compared with in year 2000 existing and registered born globals in FIBO project.

Chart 21 Born global Industries A



This Chart clearly illustrates that born globals are mostly high technology companies (37 registered). Combined High systems and High Know-How are second largest group with 32 registered born globals. Others, High Service and High Design, are a minority.

Chart 22 Born global Industries B



This Chart, on the other hand, clearly indicates that in failures the High System and High Know-How are dominating. Of fourteen born global failures identified ten are in that particular business area. High service and high technology play a minor role. The analysis of these industries indicates that for a Born global it is more dangerous to be in a High Systems or High Know-How than in the High technology business, which is the most dominating born global industry.

As a conclusion the first part of the research answered its research questions.

When have born globals failed? All the born globals that were identified during the research of micro films and company register system failed in 2001 and 2002, although the time frame of the study was originally set to study failures from year 1995 to 2002. Moreover, year 2002 was more hazardous for born globals. It was interesting to read news archives in order to find out the changes in environment to those years.

How old are born globals when they fail? Born globals are on the average 4.5 years old when they fail. The variation is quite large among these fourteen born globals, but the study indicates that over half of born globals fail before they are four years old. This is a clear sign when trying to understand what went wrong. Most likely the companies won't even have been able to survive from the death valley of a start-up firm meaning that their cash flow never in their history became positive (Barrow 1998).

What are the greatest macro factors behind failures? Recession and burst of hype have been, on the macro environment, the largest powers affecting lives of born globals. The burst of hype made financing commercialization and/or R&D more difficult and this could have been the greatest reason behind the failures according to non-academic press. The recession made the market pull weaker and therefore no help could be had in form of increasing sales.

What are the greatest meso factors behind failures? Meso factors seem to play only a small role, if any, in born global businesses. Logical results came up in statistical analyses, but those findings weren't significant enough to kill the zero hypotheses, i.e. any significant effect in variable changes to sample values.

What are the distinctions in failures between born globals and common SMEs? The statistical distribution of failures in the years 1995-2002 is different for born globals and common SMEs. None of the born globals failed before 2001, but 30% of common

SMEs in born global businesses had already failed. Born globals tend to die younger and their age variation is smaller. Both those results are significant in statistical terms.

4 Methodology

In this part the study discusses the methodology and how the answers for the research questions are searched. Even if the topic itself is not searched, the study uses methods tested by various researchers. On the other hand, some researchers might find the validity and reliability discussion in the summary chapter useful, if they are themselves willing to conduct the study with similar difficult issues among high tech, high system, high know-how or high service entrepreneurs.

The structure of the chapter is divided in three parts: 1) Methodology literature, 2) Methodology process and 3) Interview questions. These chapters should give a picture of how the study is conducted and how the results are affected by the method. The methodology choice is chosen to minimize the distortion caused by imperfect data records kept in the company boards. This imperfection cannot be totally corrected and thus the challenges in methods are seen in the limitations part in summary chapter.

4.1 Methodology Literature

In this part the study reviews the survey research literature. It is divided into seven logical paragraphs, which are in order of planning process. The structure first discusses different types of social surveys, then survey planning, observation, asking questions, interviews, analyzing the data and finally raises typical criticisms seen towards social surveys.

Gardner (1976) divides the social surveys in four categories: Type no. 1, type no. 2, type no. 3, and type no. 4. Type no. 1 is a study of demographics in a given environment and thus it is the easiest to conduct. Type no. 2 is a study of economic conditions, which basically tells if the people are poor or wealthy. Type no. 3 studies activities of people. For instance, the financial expenditure on travelling, entertainment and various items of shopping might also be of interest. Type no. 4 surveys people's opinions and attitudes. This is, according to Gardner, the most difficult type of survey. Everyone is proud of one's opinions and declares that he/she has a right to them and (though not always)[21] that s/he doesn't mind who knows what one thinks. By attitudes a more stable state of mind than just fluctuating opinions are meant. (Gardner 1976) Even if these surveys are mainly directed towards non-business surroundings, the methods are still quite same. In this study the most useful description is type no. 4, while the strategy decisions made in the companies are in people's minds as opinions and attitudes. Hard provable facts are scarce in this type of study.

Planning a survey is divided in two logical parts. The first part is the preliminary steps before making the final plan. The second part is then the final or overall plan and time schedule. The first part is divided into four divisions, which are a) familiarization of the problem in general, b) further explanatory work, c) selecting objectives and d) selecting the choice of methods. (Gardner 1976)

In this study the first division of the first part is conducted by reading academic and non-academic literature about the developments in business environment. Division b is about the sharpening of the focus even more. This was done by informal discussions with various experts like professors, venture capitalist and entrepreneurs. The objectives of the study are set in the research plan phase. Those are harmonized with divisions a and b in survey planning. The division d is about consideration of how people are respondent to be selected and what statistical analyses will be required. (Gardner 1976). In later parts this respondents' selection process is more widely discussed. Statistical analyses are, in this study, quite limited because of the depth of the study. In the first part of the study (macro- and meso environment changes) basic statistical tools and significance test are employed, but for the later part (micro changes) simpler methods are sufficient.

The second part of the survey planning is in eight phases. The first phase drafts the questionnaire or the interview guide. The second phase pre-tests the sustainability of wording in the interview guide. The third part is the first revision, i.e. printing of

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[21] Gardner's mark

sufficient copies for a pilot survey. In the fourth phase the pilot survey (pilot study) is conducted. If the fourth phase reveals new information about the understanding of interview questions, the fifth phase prepares a second revision. After that in the sixth phase the survey is conducted. In the seventh phase the data is analysed and in the last phase the report is written. (Gardner 1976)

The observation in the interview process is done for four different purposes: familiarization, preliminary assessment, formulating hypotheses, and to observe actual behaviour. (Gardner 1976) Even though the study uses interviews to gain answers to open questions, social surveys are affected by people's behaviour. Therefore observation is more than just writing down the words of the interviewees. Familiarization is the objective in the study's observation plan. Before we can ask meaningful questions about any place, we need to know what it is like in general (Ibidem).

In asking questions general principles apply whether one is asking questions by mail or in person. An interviewer can sometimes cope with unforeseen difficulties but otherwise the problems are the same. The document on which the questions appear is usually called either a questionnaire, interview schedule or interview guide. The questionnaire is a formal inquiry, which the respondent fills in him/herself. The interview schedule, or recording schedule, is similar with the distinction that the interviewer asks the questions and is responsible for writing them down. The interview guide is for a less formal or even quite informal interview in which the interviewer may have some freedom to use the most suitable sequence and wording. He also records the answers. (Gardner 1976).

The study uses open type of questions, i.e. interview guide. There are many advantages but also disadvantages in this procedure. Gardner (1976) explains: "Because open questions permit greater freedom of expression, they help the interview to sound like an ordinary conversation. This puts the respondent at ease, starts him thinking and talking about the topic. (…)Open questions encourage a richness and depth in answering and this is essential in the preliminary fieldwork. [However] But because of the resulting greater variety, with a larger sample and team of interviewers in the survey, the interpretation and allocation to pre-coded categories often becomes extremely difficult. Statistical treatment and comparisons may be impossible. [Moreover] Not all people respond to open questions with a flow of information. Some become tongue-tide, suffer from mental blocks or feel awkward. Perhaps this is because an open, unstructured question provides no guidelines as to what kind of information is expected."

Interviews vary depending on the formalness of the actual event. Those vary from informal to formal depending on the choice of the method. (Picture below) The study uses a focused interview to fully utilize the gained knowledge of interviewees. Gardner (1976). This means that the interview is guided according to lead questions and then focuses on an interesting area.

Interviews

Informal ⟷ Formal

Unsystematic questioning	Casual conversation	Unguided Non-directive	Gently guided Funnel Inverted funnel Focused	Firmly guided Systematic Standardised

(Ibidem)

4.2 Methodology Process in this Study

This chapter gives the representation on how the survey was conducted for the study. Firstly, it illustrates the company selection process, secondly it discusses the method by which the interviewees were selected and finally, how the style of interview was decided.

4.2.1 Selection of Case Companies

The case companies were selected from a list of ended Finnish high tech, high service, high know-how and high system companies. The time span was selected by the ending date from 1995 January to 2002 September. These were in the business fields of chip manufacturing, computer assembling, computer sales, IT consultation, and IT services, mobile technology, mobile tech consulting, software development, electric commerce etc. The selection of was based on those industries, because the Finnish patent register administration keeps archives according to those business fields above. The initial list of companies included 337 companies, which had announced their business to be in those fields and the registered company code had ended. The list was provided by the Finnish patent and register administration and it included the company names and their register numbers (Finnish Y-codes).

High design companies, which are one of the fields of born globals, were left out because of the special nature of those firms. Moreover, the identification of potential born globals in the archives of Finnish patent and register administration is challenging. Therefore, an accurate high design born global list is non-existent and the depth of this study would not allow a deeper insight into that special field of bankruptcies of Finnish high design born global companies.

The initial list of over three hundred companies was shortened to just over eighty. Many companies that were left out from the second list were either in the wrong field of business or hadn't been bankrupted at all. The search of Y-codes in the company information system[22] clarified the business fields and, for instance, many high tech companies in the initial list were in whole sale, Finnish customer support or similar which didn't carry a global potential by its nature. Some of the companies were also just merged into other companies and changed their business field to another. This should not be interpreted as failure, to say nothing of bankruptcy.

Focusing on the second list of bankrupted companies was done in the microfilm archives of the Finnish patent and register administration. The microfilms contained information about the financial statements of the companies, which were registered. According to the Finnish law, a company has to register its financial statement in the

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[22]yritystietojärjestelmä http://www.ytj.fi

trade register if its business form is a limited liability company. However, even when smaller and more informal business forms were left out in the first round of shortening the list of companies, still only fifty-seven companies had registered financial statements. Even when the Finnish law doesn't demand the company to register their degree of foreign sales, some companies informed the shareholders from the company's global presence in the board's report. According to those indications the list of companies was shortened to thirteen companies.

Informal discussions with different faculty members in HSE, among Finnish venture capitalist and the researcher's networks brought out two more companies which were not on the initial list: 360.com and Taika Technologies. Both of those companies went bankrupt after the time span surveyed for the initial list, but still had many features that gave depth to analyses.

The next phase to study company history was to take a closer look of the registered forms and papers of each company. For instance, the company annual meetings were surveyed from the archives of the Finnish patent and register administration to address the main events in the company history. The names of the company's key players were nearly collected in this phase, too.

The final list of the companies was still shortened when the interviews (later part) revealed information, which obviated a company from being analysed. Some of those companies were not independent but were heavily influenced by their mother companies. The reason to bankrupt such a company could be just cut of financing from the mother company and therefore it's not useful for this study. Another reason for these last minute leftouts was simply the unreachability of company founders. There is more about that in the chapter below.

4.2.2 The Selection of Interviewees

The study uses top to bottom approach in the interviews. Because the aim of the study is to understand the strategy reasons behind the born global bankruptcies, it is natural to interview the board members who had the highest possibility to influence the strategy.

Even if the board member in question didn't actively participate in the creation of the strategy, he/she should know what the company visions and strategies were. The secondary source of interviewees were company CEO whose primary responsibility it is to implement the strategies set by the board and the final source of interviewees was the company management team. Some limitations to this approach were countered because of a challenging reachability of the company's key people.

The group of interviews from each company should contain at least one founder. The company vision might change quite rapidly in crises, and therefore the study should interview the founder who knows the initial purposes of that company. Later board members and CEOs might have a totally different perception about the company's vision.

Investors are interviewed as board members even if they might have a biased view of the failure of the company. Conflicting interests might cause the reason for difference in perception and agent problems in company and therefore those interviews have to be more carefully analysed and verified from another source. The purpose of this study is to find out the entrepreneur's view to strategy mistakes of the born globals.

However, in some cases the interview selection was based on the contactability of the person. The search of personal networks, the database of HSE, the internet, is sometimes quite difficult. The name of the founder could be connected to a phone number, but that doesn't certify the validity. After the first interview of each case company the interviewee was asked to complement the contact information Chart. This is the most efficient way of finding contact persons at a short notice.

4.2.3 Selection of Style of Interview

The style of interview is open discussion type. According to methodology literature people will be less defended when asking difficult issues in an open face-to-face conversation. However, it will be feasible to use phone interviews when the face-to-face interview is impossible in the given time line (spring 2004). E-mail answers will not satisfy the reliability set by the purpose of this paper.

The pilot study was conducted first to test the interview process itself. The question list is quite long to be conducted in a short face-to-face interview. One of the Pilot interviews purposes was to measure the duration of the process. That eased the booking appointments for later interviews with other interviewees. The pilot study was conducted at Prof. Reijo Luostarinen's home, where he was interviewed with the interview guide, which is set as appendix of this study. He was a business angel of one of case companies of the study (Taika Technologies). Since the interview was a success and didn't raise any additional questions, that interview is also employed in the case analysis of Taika Technologies and the second revision was conducted.

4.3 Interview questions

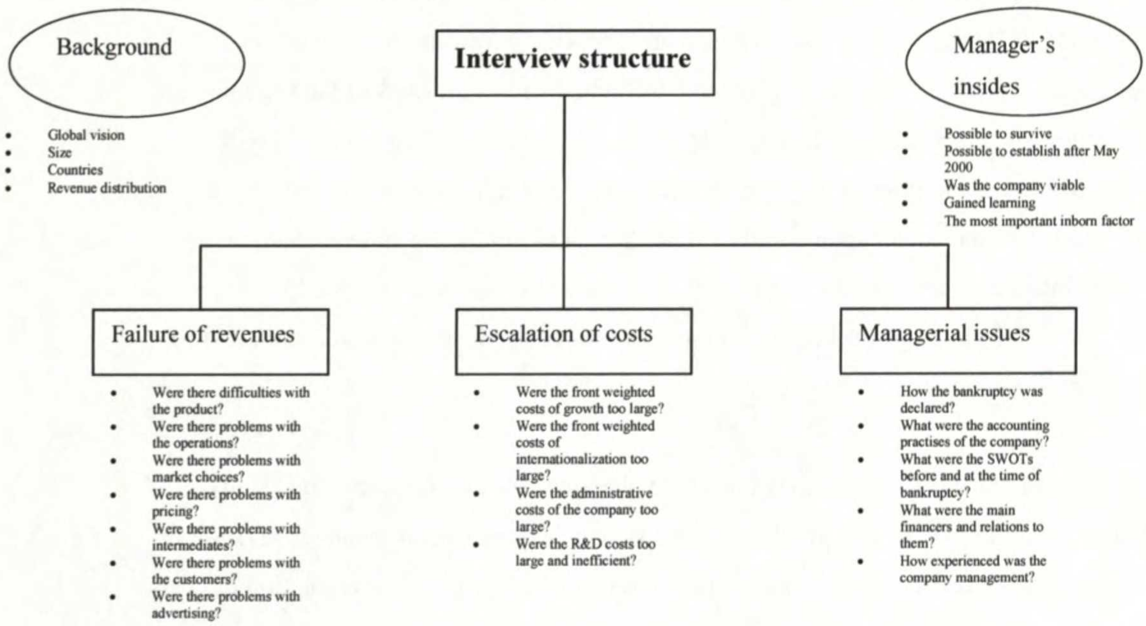
In this chapter the study will discuss shortly the reasoning behind the interview questions. Why the questions are selected and for what purposes are the answers collected? However, one should mark that the actual strict questions in the appendix are only for in-depth purposes. The paper develops a series of lead questions that will introduce to the interviewee the issue in question. If the interviewee will see no difficulties in that subject that could explain their bankruptcy, the issue is dealt no more in that interview. The structure of interview is divided into five divisions: 1) background, 2) failure of revenues, 3) escalation of costs, 4) managerial issues, and 5) entrepreneurial insides.

The second, third and fourth divisions are explanatory for the purpose of this study. Those are divided into several other questions slots. The failure of revenues division is divided into slots according to the strategy model of POM$ICA. The escalation of costs division's slots has to do with growth expenditure, internationalization expenditure, extraordinary administrative costs and R&D expenditure. The fourth division deals with managerial issues in slots such as SWOTs of the company, accounting practices of the company, personnel relations of the company, financers, and management team experience. These divisions and slots are more thoroughly discussed in the later part of this chapter of methodology.

The purpose of the background questions is to define a born global and see the companies' significance to society. This general information is dealt with at the beginning of the interview in order to understand the context of the company. The fifth division deals with entrepreneurial insides to appreciate the gained experience of the unlucky entrepreneurs. Those are also more thoroughly discussed in later parts of this chapter.

Below is a picture that illustrates the interview process in relation to question divisions. It also introduces lead questions. Lead questions in context of this study are questions that introduce the topic to interviewee. If a particular lead question doesn't seem to stir the issue, the interview will not go deeper in that slot.

Chart 23 Interview Structure of the study



4.3.1 Background Questions

First in this chapter the study examines the definition of the born global company by reviewing the company's vision. Secondly, it takes into consideration the quantitative and original definition of born global company. Thirdly, the study will explore the countries that the company was in. Fourthly, it will discuss the impact of bankruptcy to the social environment. Finally, in this chapter, the study discusses the structure of the organization of the bankrupted case companies.

The global vision is the minimum requirement for a company to be categorized as a born global. Therefore, it is methodologically wise to bring the issue up in interviews. A global vision could be written in the company annual reports, but most likely it was in the minds of the company's founders. That's the logic behind categorizing companies according their global vision.

The degree of the foreign sales or, precisely, sales outside home continent in relation to the company's age is the original definition of a born global. However, that might be difficult to measure in most cases. The companies perhaps went bankrupt before generating any revenues in home markets even. Therefore a born global company would not meet the requirements of the original definition and to narrow the interpretation of a born global will not serve the purpose of the study.

Countries where the company made investments in (either direct or non-direct) indicate the practical global orientation of the company. The list of markets that the companies were aiming at could provide useful information for future researches in similar field born globals. It could even indicate the risk of a particular market in some extent. The companies have not printed out every country they were in, but in interviews some knowledge about new markets that were not in annual reports might come out.

The highest figures of staff, turnover and balance sheet value indicate the significance of the company in a social context. Bankruptcies always have an impact on the entrepreneurs and the personnel of the company but also on all stakeholders. Everybody looses in bankruptcy. Therefore it is reasonable to measure the size of the company in some quantitative manner.

The organizational structure indicates the company management's efficiency in communicating across the company units. Small companies might grow uncontrollably creating huge gaps in communication routes of the company. This might lead to competition among company units and this is a waste of scarce resources in a start-up born global.

With these background questions the introduction of every case company will be similarly logical. With these answers to these questions one could draw conclusions about the company, e.g. whether the case company is a born global or not. Next in the study the reasons for a failure of the revenues are discussed.

4.3.2 Reasons for Revenues to Fail

Companies fail through cash crisis when their revenues are continuously smaller than costs. For reasons for the revenues to fail the most logical are marketing, strategy and market strategy related reasons. Therefore one could divide its ways to guide the thought through Kotler's four Ps. The four P model is simple and easy to communicate. However, a more thorough analysis of strategies needs another type of framework to get the most reliable and comprehensive point of the passed strategies. Therefore the study uses Luostarinen's POM$ICA model in the same order.

4.3.2.1 Product

A product or a service is the key competitive advantage of a small start-up company. The start-up SME doesn't have advantages like a well-known brand, well-established distribution channels or existing clientele. Therefore, the company has to impress the customers by the technical excellence of the product or service. Reasons why the product could have failed include, according to informal discussion with venture capitalists, at least:

- extended R&D
- functionality
- usability
- lack of need

4.3.2.2 *Operations*

Foreign operations are expensive and hard to handle by a start-up SME. If the product has been good and finished, the operation mode could have been the reason behind the failure. The complexity of network and the distance to customers could make it impossible for a born global to collect revenues. As operation modes born globals might use, according to literature, a variety of different international business modes such as

- Indirect export, meaning selling to some Finnish company to sell products abroad
- Export, meaning selling to some agent company to sell products abroad
- Own export, meaning a sale of finished products to end users
- Management contracting, renting staff for benefit of a customer company abroad
- Licensing, selling rights to use the company know-how for benefit of a customer company abroad
- Franchising, selling rights to use the company concept as a whole for benefit of a customer company abroad

In addition to international business operation selection the study will investigate the dynamics of the business mode in an individual company. Born global literature argues that they violate the traditional pattern NIMOS-DIMOS-NIPOS-DIPOS. Direct investment operations abroad carry more risk than non-direct ones.

4.3.2.3 *Markets*

Wrong market selections might lead to problems at the beginning. Born global literature argues that these companies tend to establish operations in lead markets despite a longer psychological distance. In other words, those markets are more difficult to understand and enter by small born global. The reasons behind a failure could be at least a) customers could interpret the product differently, b) they could be used to buy it elsewhere, c) they don't want to buy a product made in Finland, or d) in those markets there are other types of indirect competition (i.e. products or services that satisfy same needs). These market-specific factors might have been the reason for revenues to fail.

4.3.2.4 ($)Price

The key component of a start-up's earning logic is the price of its product. The pricing in the context of this paper means that if all the factors above are well functioning, the problems might lie in the pricing of the products or even in the earning logic. The pricing might fail because a) competitors could offer a substitute with a more reasonable price, b) the price doesn't cover the costs of production, c) customers have less value for the product than price, and d) the earning logic is based on assumptions of usage that aren't true (e.g. monthly bills don't bring cash to cover the costs or once sold with some price it gives the right of usage forever, which still yields costs to the company) or similar.

4.3.2.5 Intermediate

The sales channel choices are one of the biggest issues for a small born global. Strongly related to the channel choice discussed in the international operations mode section of this chapter, those modes generate a different number of intermediates between the producer and the end user. The reason for problems might be a) wrong partners, b) unreliable deliveries to the end customers, c) selling efforts of the sales channel members etc. All those might explain the bankruptcy of born global. Therefore the study will present the structures of sales channels of those unlucky companies.

4.3.2.6 Customers

A small start-up company is usually dependent on only a few, if not one large customer. According to the born global literature the born globals tend to target directly to lead customers. That particular customer should be the source of the future growth and a stable flow of revenues. However, many larger companies tend to use their bargaining power to get a better deal from their born global supplier. They don't necessarily need the born global, but the born global needs them. Therefore it is vital to examine which companies were the target customers.

4.3.2.7 Advertising

A start up born global encounters a difficult task in seeking new and unknown customers. Promotional failures might explain the bankruptcies, because new technology is likely to be hard to communicate to customers. The customers might misunderstand the content of the service or see no use in it even if it could be useful to them after all. Promotional means cover all the aspects of personal sales efforts to advertisements.

4.3.3 Reasons for Costs to Escalate

If the sales are high and cash revenues flow in, the only thing that could explain the liquidity shortage is cost escalation. A start-up company could only concentrate its energy to either profitability or growth. By definition born globals are more likely to aim their strategies towards high growth, and profitability comes as secondary objective. Therefore, the cost might get high for several reasons, but below there are issues to clarify the main reasons. Firstly the study discusses the production growth, then the internationalization of the company, and lastly the administrative costs.

4.3.3.1 Growth of Production

In the late 90s the common guide to SMEs in the markets, according to the Finnish press was to seek maximum growth. Many SMEs increased their capacities before demand in great extent. The bankruptcy might have been caused by too large front weighted costs of production capacity increases. The growth in this study covers the areas like a) people hiring, b) machinery, c) warehousing, d) everything else that might come up in the interviews.

4.3.3.2 Internationalization of the Company

The internationalization process is a costly part of the born globals' development. Therefore it is crucial to understand if unit establishment costs, travelling costs, and day based compensation for negotiators are the reasons behind a possible cost escalation. If the company sends out an expatriate to start a direct investment marketing operations (i.e. sales unit) it faces large front weighted cost in form of salary of expatriate employee, lawyer fees, facility rents, office procurements etc. According to informal discussions with venture capitalists, it could take up to five years for a foreign unit to be self-sufficient.

4.3.3.3 R&D Costs

According to the literature, R&D expenditure in high tech companies plays a significant role in the total costs of the company. Variation and surprises are not rare in R&D results either. Therefore any extensions in the time needed for product development are costly and unfortunate events in the life of small start-up. What were the hindering factors of product development indicate the sustainability of the business idea in general. Some technological orientated researchers might aim too high in product development and thus the product will not be finished at all. Those findings could be interpreted to be technology orientation that is not the company's preferable behaviour according to marketing literature.

4.3.3.4 Administrative Costs

One could argue that in the late 90s the hype gave the company management the right to spend the liquidity for elevation of business operations. Salaries of management are also a crucial part of the analysis of administrative cost escalation. An example of the extraordinary administrative costs could be Riot Entertainment, which had its own movie theatre inside its HQ and fresh orchids on the desks everyday. Wapit was known for its policy of free soft drinks for its employees. However, these extra administrative costs might be small in regards of other business operations. On the other hand they violate the basic idea that start-up businesses should start small - generate profits sooner (Barrow 1993).

4.3.4 Managerial Challenges

In this study managerial challenges cover all aspects from organizing business to communication between stakeholders. Some venture capitalists have in informal discussions revealed a concern for the competence gap in usually engineer-driven high-technology companies. However, preliminary findings in the case of Taika Technologies imply that the even business academics could run in trouble in rough markets. The business experience of the management has an impact on all factors mentioned in the cost escalation- and revenue failure part. One should note that in discussing managerial skills, the reason-consequence relations are the most challenging part to interpret.

4.3.4.1 SWOT-analysis of the Companies

According to the informal discussions with the jurors of Venture Cup, the SWOT analysis is the most commonly misused strategy tool. Therefore, weaknesses and threats of the small born global in the analysis might differ from those that actually failed the company. This designates something about the skills of the management, however, even more about the most likely reasons of failures of the born globals. If those weaknesses or threats had not come-up before the final death struggle, what are the reasons for them?

4.3.4.2 Accounting processes of the company

According to the Finnish law (see chapter above) the company can fail trough two different routes. Either the debtor can sue them in court because of failed payments (Cash crisis) or if the equity of the company is less than half of the face value of the capital stock (Technical bankruptcy). The latter is more likely to be the cause of the dire accounting processes. Who are the debtors suing them might also have useful information for the purposes of this study.

4.3.4.3 Personnel Relations

A small start-up could be strongly personated to one or few founders. This could be a difficult challenge for the business development, as those founders will see any change of direction as a personal mistrust towards them. In many contexts of new venture training programs (i.e. Venture Cup) the emphasis is more on a well-functioning team than just on a business idea. A common vision in units across the developing organization will ensure the efficiency needed in a SME with scarce resources. Communication over functions is a strategic responsibility of the company management.

4.3.4.4 Financers

One reason behind the failure of a business might be that the starting of operations cannot get enough financing. Even good businesses cannot start from scratch, so venture capitalists, business angels and large investments from entrepreneurs are needed. For some reason or another it could occur that after the first round of investments the second round doesn't succeed and a promising business goes under. Literature argues, though, that in theory that is not the case. In Finland, where venture operations are small, can a risk of failure for one financer became too large and it withdraws from the project. The burst of hype in May 2000 also made the venture capitalists' liquidity a scarce resource according to many investors. That could be a deathblow for a born global company.

The venture capitalist should play an active part in business development. According to literature, reviewed in literature review chapter of this study, SMEs wait to gain both equity capital and mental capital from more experienced business angels and venture capitalists. Therefore, it is useful in purpose of this study to research investor communication and relations in the company.

4.3.4.5 Management Team Experience

According to Benjamin Franklin[23] the experience is the best teacher but a fool will learn from no other. This is the reason behind the discussion of management team experience in those unfortunate companies. The industry experience refers to the time how long the managers had been in industry. It is said that young management is a challenge to born globals, according the literature. In the Venture Cup business plan competition or in international design business management programs the emphasis is also on multitalented teams. Therefore it is useful to discuss the education backgrounds of the board of directors. Those could at least partly explain the initial reason to problems.

4.3.5 Entrepreneurial Insides

Lastly in these interviews the study will discuss the lessons the entrepreneurs had learned. Perhaps even more important than just finding out the reasons of failure, would be the way how the crises would have been avoided. In interviews, therefore, the paths that could have saved the businesses should also be discussed. That could also lead to new interpretation of the fatal causes of bankruptcy.

[23] American printer, writer, philosopher, scientist and inventor, 1706-1790

Before May 2000 the money was not a scarce resource for the companies. It was totally different from the situation today. If the company had been established today, the requirements of business development would have been different. This aspect of discussion gives insides of the sustainability of the business idea.

The business idea feasibility in today's knowledge might be questionable for some companies. In some businesses the reason for failure might be just caused by a misjudgement of markets as a whole. It might turn out that the company would have not survived anyhow. The business development could have started with a market pull for an idea, not a market pull for products.

One of the purposes of the study was to take in use the experience of the entrepreneurs. What they have learned should be shared knowledge between any business professionals. One should be able to learn from another's mistakes of. Therefore the study raises this question.

For a more detailed list of question see appendix A.

5 Case Companies

5.1 Vista Communications

Background Questions

Vista Communications was founded under the name Others Oy, in 14th of May in 1991 by Harry and Sinikka Santamäki. Originally, its field of industry was purchasing, managing and selling shares. By 12th of June 1991 a new board of directors came into power. Tuomo Janatuinen acted as chairman, and other members were Esko Tikka and Harry Santamäki.

However, on 15th of July the same year they changed their name to Vista Communications and conducted a new industry definition for themselves which was visual telecommunication equipment and part production, R&D, import and export.

They also planned to provide training and other same sort of services for their customers. 22nd of October the same year the company conducted a new auxiliary business name: VistaCom.

22nd of June 1992 an extraordinary general meeting was held and that affirmed convertible bonds for two Finnish public investors SITRA and KERA. More convertible bonds were issued 1st of December 1993 to the same public investors. Financing of the company went forward by issuing bonds with warrants to the management on the 24th of August 1994. 11th of November 1994, 12th of May 1995, and 27th of November 1995 more convertible bonds were issued. The last convertible bonds were issued the 14th of September 1998. In total, SITRA and KERA invested in convertible bonds FIM 13,596,600 (€2,286,279.40).

5th of June 1997 Tuomas Koljonen took over the CEO post of the company; the board of directors remained the same.

5th of July 2002 the company went bankrupted.

According to Esko Tikka (18.2.2004) and Harry Santamäki the company had a global vision. The product was aimed at substituting the travelling and thus it had to be global. However, most of the income was domestic.

Failing Revenues

The product was a visual telecommunication device, i.e. video telephone. A patented technology was based on pixel movement prediction, which made it possible to use narrower connections between destinations. The main aim was to offer video conferencing possibilities to companies. However, the product was far too early in the markets. No one else had a videophone so why should the other buy one. The technology of the product was complete and functional. However, the customers encountered some technical difficulties while conferencing. The system crashed and it took quite a while for the picture to build up again. Nevertheless, the functionality problems were not the issue for the company.

The main feature of the product, i.e. voice embedded picture, was not as important as the R&D initially assumed[24]. That was the product's main flaw. Just before bankruptcy the company changed its product strategy and started to sell the codec of the video compression. However, that didn't save the company.

The main route of Vista Communications to foreign markets was piggy bagging. If the sale was made in Finland, the company usually had an opportunity to sell the product to the customer's subsidiaries, too.

The markets of the customers were global that the market potential of Vista Communication was global as well. The main market, however, was Finland with its global (and international) companies.

Pricing was value based and earnings came from turnkey projects. The estimated price of a single video conferencing studio was 50 000 €. Even that hardly covered the costs while the company suffered from small scale. Almost all inferior parts of production were outsourced to other companies. Thus, the earning logic yielded only minor incomes in the first years.

Large telecom operators acted as intermediates to other countries. VistaCom's products were mainly piggy bagging to foreign markets with those operators, but also with large Finnish companies, which had bought the technology in Finland. They naturally wanted to use VistaCom's products in their foreign subsidiaries.

The company targeted large Finnish multinationals as its main target segment. Those were the only companies that could have afforded to purchase the VistaCom technology and they had the most advantages in using such a technology.

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[24] As an anecdote: Esko Tikka (18.2.2004) mentioned that in personal relationships the picuture is more important. Therefore the commuters liked to use the technology when communicating with their families.

Market promotion was mainly done by direct marketing to large customers. The complexity of the product made it necessary to try convincing the customers in face-to-face discussions. The main arguments in selling were firstly reduction in travel expenses and secondly the supply of facial impressions in meetings and negotiations. However, at a later point it turned out that decision makers liked to travel more than sit in the studio.

Escalating Costs

Huge outsourcing expenses limited the growth. The company tried to avoid front weighted costs of self-production and tried to concentrate on product development. Therefore, it was useful for them to try to outsource as much as they could. However, this led to a situation where the costs of manufacturing lacked economies of scale. That had a tremendous impact on the variable costs of the product and thus the price.

The internationalization costs were not the major factor in the bankruptcy of Vista Communications. However, the investors agreed that it was expensive to organize sales abroad. The selection of the business operation mode decreased the cost of global growth.

The company managed to retain their humble attitude to business even the short while when the money was not a scarce resource. The times when the investors got involved in the company were truly different from the days of hype in late 1990s and the beginning of 2000. The time of 1992 when the company got finance from the investors didn't make it possible for the entrepreneurs to celebrate. The days of the worst recession of modern Finland didn't help either.

R&D costs were a large proportion of total costs. However, the extended development period didn't hinder the opportunities of this small company. As said in previous paragraphs the product was ready to be marketed and thus the R&D costs can be interpreted to be on the level of high technology average.

Managerial Challenges

As weaknesses in SWOT analysis the board saw product focus, technology orientation and the reliability of such a small company. As threats the company anticipated before the bankruptcy that the bigger companies would probably take their market shares. However, nobody in the board saw the total market failure caused by the technological development on other branches, which made the company's product obsolete. Moreover, the company overemphasized the importance of moving picture in their products, as explained in the product paragraph of this chapter.

The bankruptcy was caused by a cash crisis. It didn't come as surprise to the company, while they claim that their basic bookkeeping was well done. The process of bookkeeping was outsourced, however, which didn't cause any trouble such as delays in reporting.

The communication was personalized to the founder of the company, Harry Santamäki. He was responsible for most of outside communication, but as head of R&D as well he also dealt with the internal communications. No significant problems were encountered in company communication.

The investors took the majority in the company in early stage. Sitra and Kera had over 80% of votes in the company's annual meetings. A few business angels also invested in the company. Those investments were made purely in form of directed emissions to company shares. That didn't discourage the company founder Harry Santamäki, while those made it possible for him to concentrate on the development of the technology. The investors put representatives in the company board, which stayed same for years. There were no major crossings of the interests in the company board in this given situation.

Entrepreneurial Insides

According to Esko Tikka (18.2.2004), the company could not have made it through the crisis. Moreover, the company couldn't be founded on the same basis after May 2000.

The major reason for failure of the company was that markets had their own direction. Vista Communication would not have survived in its chosen market with modern web-cam negotiations in the internet. The product was at the same time too early in the markets and once it came into crisis it was already too late. As a lesson from the case Esko Tikka mentions that one should know their customers well before starting the business. Market development should never be overestimated.

5.2 APC Attoparsek

Background Questions

The company was founded on the18th of May 1994 under name Avantsoft Oy. As its core industry they defined ICT consulting, programming, IT program sales and purchase, export and import etc. As a company chairman Tapani Rosbäck started with board members Janne Niemensivu, Timo Taalasmaa, and Lauri Kalima. The next mark in the record is a directed emission where new board of directors came into power. The new board of directors consisted of Chairman Petri Hakola, Jari Mäkelä, Hannu Soini, and Janne Niemensivu. The company changed its name to APC Attoparsek the 25th of February same year. 28th December 1999 Heikki Savander was appointed as company CEO. Soon the company granted several option rights to company employees and the board of directors on the 29th of February 2000. 25th of March 2002 the company CEO resigned from the post. For a short period of time the CEO post was entitled to Jari Raappanen (15.4.2002-30.4.2002). The company was declared to bankruptcy 6th of July 2002.

According to Janne Niemensivu (25.2.2004) Apc Attoparsek had a global vision. The company was involved in several European countries; however, the main market was clearly Finland.

Failing Revenues

The product of Apc Attoparsek was intelligent web solutions. The main utilization target of their products was different banking software such as stockbroker systems. The product was a combination of software licences and tailoring services, thus this company was clearly in the high system industry. Probably the company's most recognized product was EQ online.

Internationalization was so undeveloped that neither operations mode nor intermediates played crucial role in the bankruptcy. The company management felt that they had to establish a market reference first in Finland before selling their know-how to other markets. However, discussions with potential clients abroad were held.

The earning logic was based on turnkey sales with customer value-based pricing. The earning logic didn't seem to be the most important reason for the company failure, but the management admits that it didn't yield enough revenues to sustain the business.

The company had only one large customer, EQ. It didn't cause any trouble in sense that it would have made its life uneasy; however, that wasn't enough for the Apc Attoparsek. This small born global faced the tough reality with other potential clients, while it turned out that banks usually wanted to develop their own software for their systems. In that sense the company collided with 'not invented here' attitude.

The main advertisement method was face-to-face conversations with potential clients. The technology was not so clear for the sales personnel, but that had nothing to do with the failure of customers.

Escalating Costs

The company growth was strongly front-weighted. Janne Niemensivu (25.2.2004) admits that it was the attitude of the time. A smaller crew would have coped with the orders. But then again, even with a smaller crew almost zero revenues mean that the company is not feasible.

The company was quite cautious of taking any large internationalization costs. The main source of the costs of internationalization was travel expenses of sales personnel to fairs and meetings. However, those were at the most on the moderate level.

The company didn't fail because of too large extraordinary administrative costs. The company remained humble the whole time and the salaries of the management were not increased to unsustainable levels. No cars were purchased at any point, either.

Managerial Challenges

The company was driven to bankruptcy by the management of the company. The crisis didn't surprise the management and it was long before clear to the key people. The accounting systems were kept in-house and that gave them up-to-date information for every board meeting. No difficulties were encountered with accounting practises.

Entrepreneurial Insides

The main reason for the failure of Apc Attoparsek was that the technology was too early in the markets. The company would just now start to make sales at the market. During later days the company was drawn to a situation were the market prices declined to an unbearable level for software like Apc Attoparsek's products. It would not sustain the heavy R&D necessary in that field. The prices should have been at least twice as high as they were to cover even the variable expenses. In a nutshell, Apc Attoparsek was in a situation where it had too much capacity and encountered too little demand.

A main lesson from the case, according to Janne Niemensivu (25.2.2004) is that the company strategy has to be clear. It should be constantly monitored and it has to have a plan B built on the side. The focus of Apc Attoparsek was more than clear, however, the company wasn't able to change direction after finding out that the focus didn't sell.

5.3 Grenwill

Background Questions

14th of August 1997 Esa Luomajoki founded the company under the confirmed name Rori Oy. The defined business covered all types imaginable. However, on the 27th of July 2000, the company changed its name to Ab Grenwill Oy and according to the new company order, the industry was defined as internet service base and wireless connection solution base development, production, design and maintenance. A new board of directors also came into power at the same time. Chairman Erkki Toljamo had, as members, Mark Kiddel and John Lundbeck.

24th of July 2000 the company announced a new emission to the company owners, issued convertible bonds and granted option rights for the management. 23rd of May 2001 the company increased the capital stock. 26th of May 2001 the company CEO Toljamo resigned. Soon on the 9th of October 2001 the company liquidation came into order and after four months the company was declared into bankruptcy; 19th of February 2002. Still, on the 30th of April 2002 the bankruptcy estate was sued by Ab X-Operations Oy (Esa Luomajoki) regarding the invitation procedure for the annual meeting.

According to Erkki Toljamo (29.4.2004) Grenwill had a global vision. Even if the turnover was small for Grenwill and it didn't reach any global sales, it gathered financing from Singapore, Canada, Sweden and Finland. The company employed sixteen people at the most.

Failing Revenues

The product of Grenwill was hybrid-renting hardware and selling software, therefore it was a high system born global. The main product was the software package, which enabled fundraising, canvassing for members and marketing for its customers. The product R&D was in time and the version Grape 0.9 was already piloted in Finland by

Greenpeace in "viides virhe[25]"-campaign. The product (0.9) was totally custom-made for the purpose, but the company was still able to develop the product even further. Product 1.0 was released soon after. Even though this still required extensive configuration by the company developers, it was clearly more advanced than the 0.9 version. The version 1.0 made the sales possible in a larger scale. The product R&D aimed for version 2.0 which could enable full customer-end configuration of the product. However, that version was never finished.

The operation strategy was mainly based on piggy bagging with the customers' network abroad. Even when the main mode of international operations was piggy bagging, some direct investments in foreign marketing operations were planned to the most interesting and challenging markets. However, the business was not mature enough to make such investments in foreign units and therefore no actions were made.

The main market for Grenwill was charity organizations in Finland and the Nordic countries. The market choice was clear for Grenwill, while Finland was the most advanced mobile phone user market in the world at that moment. Test marketing the products was most convenient in Finnish markets. Moreover, the hype was strongest in Finland and thus the company decided to locate in Finland. In the longer perspective the company aimed at global markets contemporaneously with technological development in those markets. For instance, the technological development of mobile equipment didn't enable the use of Grenwill products in the beginning of 2000s. Therefore one could say that Grenwill aimed at markets if the client had enough networks there and market's infrastructure was sufficient.

The earning logic of Grenwill was based on royalties and a monthly fee. The monthly fee was set high to support servers and other hardware necessary for canvassing for members and fundraising. However, the actual profits should have been made through royalties from fundraising and/or member canvassing. The logic behind the revenue sharing was that the company could get a fraction from the donation to that particular

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[25] "Viides virhe"-campaign was Greenpeace's effort to prevent Finnish government to give a building permit for Teollisuuden Voima (Power of industry coalition) to build a fifth nuclear reactor in Finland

charity organization. In addition to monthly fees and royalties, the organizations could employ the sms-gateway for advertising purposes (push sms) and from that usage the company could charge the customer. However, this form of revenues was estimated to be small because of the special nature of many client organizations.

These charity organizations acted as intermediates to end-users. However, in a technological sense the most difficult intermediate were the telecom operators. Even though the company could negotiate deals with most of European operators, the policies in providing sms-gateway varied. Telecom operators priced their technology highly and that made business almost impossible. It wasn't rare to have deals were the operator would have taken over half from the donation. That made the situation almost unbearable.

The customer focus was unique and narrow. The company aimed especially at charity organizations' global markets. The first customer was Greenpeace Nordic and they piloted Grenwill's product and its ability to gather members for Greenpeace. The organization was content with the product and it is said that the member quota doubled by the mobile campaign (not confirmed). Other client contacts Grenwill had included Amnesty, Amex[26], WWF, and Suomen lukiolaiset.

The market promotion was done through direct contacts to organizations. The company regarded itself as being in business-to-business markets where it sold products to organizations and revenues flew from the end-users to them through the charity organization. Business negotiations were done in small teams face-to-face. Interest toward this product was intense, and it seemed that every contact made accumulated a deal. Communicating with customers was easy and agreements were easily reached.

Escalating Costs

[26] Amex is also involved in charity work in addition to working as creditcard company.

Grenwill's company growth mainly meant acquirements of hardware and a deliberate growth in personnel. At the most (as said previously) the company employed sixteen full-time employees. Most of them were involved in R&D. The company personnel were global even though most employees came from Finland. The cost of human resources was quite high because of Finnish taxation. Foreign experts would not settle for less than they would get in their home country. In spite of the high cost of foreign labour the company needed the language skills and relationships that were essential for the type of business the company was involved in.

The costs of internationalization were conservative. Despite the fact that the company sent always two to four persons to customer negotiations, the travel expenses were, at most, moderate in relation to overall expenditure. The company didn't establish any foreign offices during its existence, even though they were planned for in the future.

The company tried to get going with a small (10 000 000 mmk) initial investment. Therefore the expenditure in the elevation wasn't even moderate. The company guideline was to eschew costs, which were not relevant to business.

Managerial Challenges

The bankruptcy of the company was technical by its nature. The bankruptcy procedures were messy and for instance, the placement of the company in liquidation was done illegally. The cash register was sufficient, even though reducing, when Toljamo left the company.

The accounting was externalized at Grenwill. The company relied on an accounting firm and its reporting was sufficient. The company management was continuously aware of the company's financial state. However, after Toljamo's withdrawal from the company, nothing certain can be said about the financial reasons in the bankruptcy, i.e. was the lack in adequacy of equity a surprise to the board of the company.

As weaknesses the company saw the adequacy of liquid capital. They were the first mover in the markets and that gave them an edge against new entrants. However, the company saw entrants as the highest threat to company. Customer focus and customer strategy were also regarded as company strengths. The realization of the threat, i.e. the failure of the second round of financing, was a deathblow to the company.

Financer relations went sour after the spring of 2001. The financing of the company was organized with two separate rounds. The financial instrument utilized was direct stock emissions. The first round was an angel round were few business angels made investments in the company. In the second round the direction of emission was aimed at an outsider venture capitalist[27]. After these two financing rounds the entrepreneurs owned ca. 58%, the venture capitalist 38% and business angels 4% of the company. The third round was planned in case the initial public offering was not possible. The venture capitalist didn't participate in company management in the extent that was initially planned. However, everything went smoothly until the market nosedived from May 2000. The investor lost a lot and was himself in a hard position to his constituencies. That made the third round impossible with this investor. Public finance from different sources was applied for but the organizations rejected application due to insufficient information. For some reason the company management didn't reply to information requests sent to them during summer 2001.

The company communication between different groups was satisfactory. The company was organized in according to the accounting in four different cost pools, however, R&D and marketing and sales were psychological groupings. The communication between the units was enhanced by a rotating office order. Some communicative problems were encountered (for instance, the company grapevine flourished), but these didn't cause any major strategic mistakes or inconveniencies.

All the necessary capabilities that the company needed were present in the team. The initial team was full of multitalented personnel with vital contacts to client

[27] Names are excluded for the delicate state of proceeding in the court.

organizations. Technological know-how was in the company's possession and the company didn't fail because of technology.

Entrepreneurial Insides

There is no one single reason for the failure of the company. However, it is obvious that the financer-entrepreneur relationships were not as functional as this type of business needs. Even if the largest piece of the company was still in the possession of its founders, the real power seemed to be in the hands of the financer. Intermediate problems with telecom operators were also a large factor in the business model unsustainability. The lesson learned from the venture is that all is harder for the first mover and thus the company could be founded again (Erkki Toljamo 29.4.2004). Grenwill failed because of raw technology and slow sales, but one shouldn't overlook the impact of financer relationships. A financer could be a great advantage, but it might just as well be a great burden. The selection of a right kind of investor should not be disregarded. (Ibidem)

5.4 Netbeacon (Reach-U Solutions)

Background Questions

On the fourth of February 1998, the company was founded under the name Net Beacon Oy. As its core industry the company defined computer program development, implementation, and sale. As a board of directors initially sat Annamari Lättilä as a chairman CEO, Timo Sillanpää, Teppo Koskinen and Anne Sjöberg. 14th of February the company took as an auxiliary business name NetBeacon ltd. More members to the board of directors were also elected: Timo Sillanpää started as Chairman, Kari Jääskeläinen member and CEO, and Kimmo Pennanen. On the same date they also increased their capital stock.

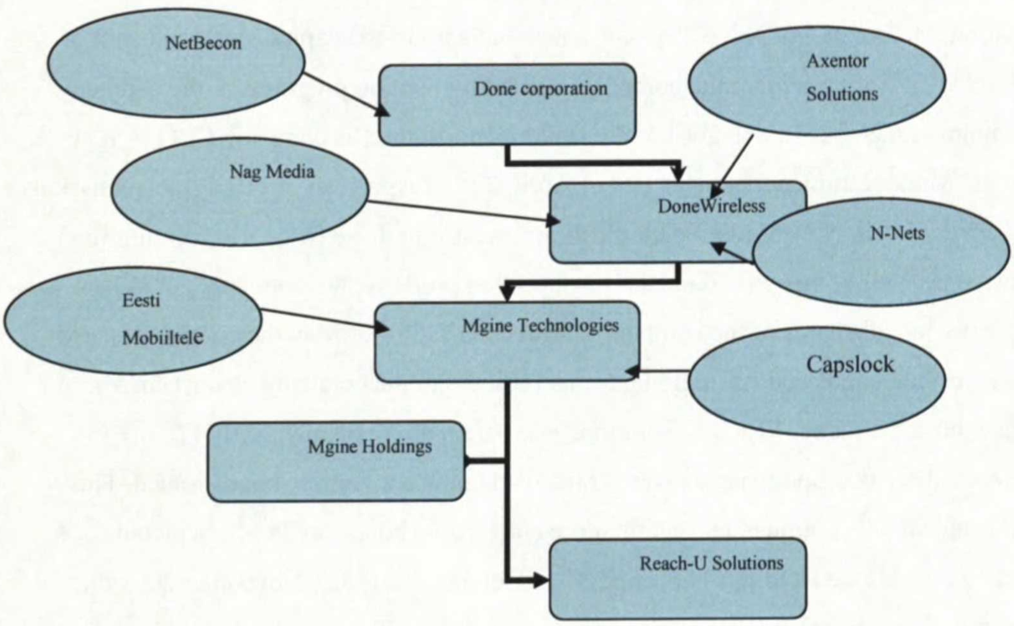
13th of April 2000 the company shifted entirely under the ownership of Done Corporation. At the same they conducted an auxiliary business name Done Wireless Oy ltd. Marjo Sjöberg was pointed as company CEO. 3rd of May 2000 more members to the board of directors were elected: Jukka Salminen, Pekka Korpela, Charles Cederholm, Jari Rinnekoski, and Hans Stenlund. On the same date the company name was also changed to Done Wireless Oy. 19th of September 2000 Jukka Salminen took the chair of the board of directors. 6th of October the company increased the capital stock and got an apportion property by the merger of the company and three other: Axentor Solutions, N-nets Oy, and NAG Media & Wireless.18th of October 2000 the company changed its name to Mgine Technologies Corporation. 28th of October 2000 the company again increased the capital stock. This directed emission was marked by AS Eesti Mobiiltelefon. 28th of November saw a new increase of the capital stock and spilt of stocks. 22nd of December the company granted two option programs to the company employees. 26th of March 2001 Kalle Heikkinen resigned as company CEO. A new CEO Mikko Laitinen took over 19th of April. 27th of April two directed stock emissions were enforced. New Media Spark plc as an investor in those twice, Conventum fund twice, as well as many individuals. As apportion property, the company got in its possession all shares of the company Capslock OY. 11th of May the company issued convertible bonds and AS region gave its business to the company against shares. A new business name, Reach-U Solutions, was taken on 4th of July 2001. 17th of September 2001 option rights were granted and new convertible bonds issued. This raising capital continued by issuing more convertible bonds on 28th of September. A merger to Mgine Holdings happened 3rd of October 2001. 30th November 2001 the company published its IPO plans and it was declared (30.11.2001.) that the company has to give up its own shares as soon as possible. The bankruptcy was declared 11th of February 2002.

Reach-U Solutions was more a complex package of visions than it first appears. The history of the company started by the establishment of a company called NetBeacon. Even though NetBeacon was only a little piece in the final Reach-U Solution, it shared the same register number than the larger whole. Many companies were merged in the bigger whole and thus the global vision is hard to define. Only thing certain is that many of these smaller parts of Reach-U Solutions were born global and therefore the whole should be treated as one, too. The business before bankruptcy reached the limits of

Europe, when few entities had sales in UK and Germany. The degree of the global sales, however, was zero. At most the company employed 70 people, most of them in R&D.

Below is a figure, which tries to point out the structuring of Reach-U Solutions as a function of time.

Chart 24 Development of Reach-U Solutions



Failing Revenues

The product strategy was strongly affected by the large number of mergers. The variety of different types of products made the cooperation between different units at least challenging. Some shared greater economies of scale than others. The product category had personalized content, mobile know-how consulting, neuronetworks, pure business consulting, data security solutions, positioning systems etc. The combining theme was mobility and wireless technology. Despite a large variety of products, some pilot versions were saleable and thus the product R&D wasn't a total failure.

The international business operation mode was mainly own exporting to those operators. Technology was sold as turnkey projects to customers or as smaller projects. Management contracting was not unfamiliar either.

The products were sold mostly to Finnish markets. However, some sales were made to other operator giants as well. The largest potential customers were in Germany and in the UK.

Pricing was based on value to customers. However, price levels varied a lot regarding the project and people involved. No company policy was created in order to define pricing. The earning logic had every aspect of high technology sales i.e. licensing, royalties, and package pricing.

Operators acted as intermediates from Reach-U to endusers. There were no major difficulties with that relation, however, the sales disappointed operators as well. End users didn't find this mobile Internet as fast as they had calculated.

As said above, the largest customers were Finnish telecom operators. Other customers in the same field were also mentioned, such as 2nd head and IOBox. The customer strategy was as variable as other strategies of Reach-U.

In market promotion the main mistake was that WAP was no Internet. The same mistake had been made in several other companies as well, but it accumulated in companies like Reach-U. In other words, the market promotion gave promises that the technology couldn't hold.

Managerial Challenges

The communication inside the company was weak. The units knew what the others were doing, but the lateral communication between the management and the shop floor didn't work, as it should have done. According to Mari Lättilä (3.3.2004) and Kimmo

Pennanen (4.3.2004), the company's vision was weak. Changing the company name and CEO ever so often didn't help either. For them it seemed that the company had no direction at all.

Appointed sales personnel were a rarity in Reach-U. The sales were managed mainly by the current directors. Those could have had difficulties in understanding the complex variety of the product portfolio. However, this seemed to be only a minor problem for Reach-U.

Entrepreneurial Insides

As a main reason for failure the interviews indicated a weak vision and lack of focus. Tortuous strategies and changing managers made it impossible to complete any product as a sellable version. The business idea of Done seemed to be to buy other companies and this is not sustainable. Even the company selection in its business was somewhat problematic, while it acquired a team, not products nor turnover. The only thing that could have saved Reach-U would have been a strong and determined leadership and focusing to essential.

Both Kimmo Pennanen (4.3.2004) and Mari Lättilä (3.3.2004) agreed that NetBeacon could have survived the crisis. However, developing markets still sets a challenge to such high know-how. For them the lesson was that a small business should not sell right away to a bigger counterpart. Working in a heavily growing company often has colliding cultures that set challenges to everyday work.

5.5 Wapit

Background Questions

The company was founded on the14th of September 1998. The first board of directors was formed around Chairman Markku Valtonen. Other members of the board were Antti Piippo and Pekka Palin. The defined industry was the Internet and mobile services. 7th of July 1999 they made a stock split and published two separate option programs for management. 11th of October 1999 new board members were elected: Hannu Bergholm, Pekka Palin, Jouko Vierumäki, and Pertti Nurmi. 10th of February 2000 Hannu Bergholm was elected as the company's CEO. 9th of March 2000 the company issued options and soon after that they got an auxiliary business name of Älläkkä. 1st of November 2000 they got another new auxiliary business name of Kannel. 6th of June 2001 bankruptcy was declared for Wapit.

According to Pekka Palin Wapit had a global vision. It had a plan to enter all the lead markets within ten years. This internationalization speed accelerated after the first round of investments and the company soon had a presence in some Asian countries. Many EU countries also hade similar operations but the most significant markets were Finland and Asia. About half of the income came from outside Europe. The company employed 120 people at the most.

Failing Revenues

The product was a high system. In addition to high know-how technology Wapit sold their way of business. The product didn't counter any direct competition at the beginning. However, soon came, among others, Sonera Zed into the market. Even though the customers found the product, the R&D was perhaps too ambitious and a clear focus was missing. As an illustration the company never released its Wapit 1.0 version.

The business concept as well as the technology sale was based on franchising. Wapit tried every market at first to find large operators by itself and to sell their technology directly. However, if they didn't succeed they started looking for a partner, which took care of the business concept in a franchising deal. That was usually the case. Actual direct investments to markets were small, basically the starting costs of the franchisee.

The market entry to Asian countries was almost immediate after introducing the pilot in Finland. However, that was problematic. The company negotiated deals with perhaps too many countries at the same time and this was a major cost factor for a small company. A slower pace in market entries and a clearer focus in market choices would have been a better option for Wapit according to Pekka Palin (10.2.2004).

From direct contacts with operators (e.g. Radiolinja) Wapit got 30% from the tax-free price as commission. In franchising deals the earning logic was based on royalties. The revenue creation was evenly distributed between those two options. The earning logic of the direct sales functioned as planned and revenues flew in.

Finding the right intermediates was a tough challenge for Wapit. They needed strong personalities with ambition to ensure a market entry through franchising. The problem according to Pekka Palin (10.2.2004) was that there were not enough "Matos" in the world to be successful in transferring the knowledge to foreign markets.

The operators were the customers. Therefore the business was purely business-to-business. The most important single customer was Radiolinja, which was Wapit's first customer from the beginning. The problem with customers was that the company never succeeded in analyzing the buying processes of them. That caused inefficiency in negotiations and thus, costs for the company.

Wapit used personal contacts and face-to-face conversations to reach clients. All market promotion was directed towards operators and the Wapit brand was not a part of the communication. The company used mainly co-branding as a mean to get attention of the end users. That was done in cooperation with operators, e.g. AskIt with Radiolinja.

Escalating Costs

The company staff grew hugely during the years. According to Pekka Palin (10.2.2004) the staff even grew too quickly, but it was the trend that time. They were successful and famous by putting an ad in Aku Ankka (Finnish Donald Duck weekly magazine) where they searched coders for their company. Pekka Palin (10.2.2004) said that it was a cheap and effective medium for that purpose.

R&D was the largest piece of their cost structure. It counted up to 60 % of total costs. As an illustration of the meaning of R&D in Wapit, the company employed in portion seven to one in favour of coders compared to sales unit.

The costs of internationalization were large but small compared to R&D. The company tried to keep direct investments abroad as low as possible, but establishing franchise operations tied up liquidity for periods of time. Travelling expenditure was also quite large because the company negotiated in many countries simultaneously. Pekka Palin (10.2.2004) admits that piggy bagging could have been a good option to be more parsimonious. He continues that it would also have eased the way in negotiations with operators. In that way they could have gained knowledge about the buying processes of their customers without spending a lot of money on customer researches.

The R&D was too ambitious and never met its schedules. As said above, the 1.0 version of Wapit software was never released. At the time of bankruptcy the results of the R&D department was uploaded on servers in a bits and pieces and no realization of equity could have gotten out of it. Pilot versions were complete and totally saleable and that generated some cash flows.

The first round of financing didn't generate extraordinary administrative costs. The directors as well as employees were detached. The only thing that started expanding rapidly was the R&D department.

Managerial Challenges

The main weakness of Wapit before bankruptcy was a high burn rate. As a threat they also saw unpredictable negotiations with business partners. However, Pekka Palin (10.2.2004) admits that he doesn't remember those for certain.

Bankruptcy was caused by a cash crisis. The cash ran out with the high burn rate of Wapit. Accounting processes were in the hands of Wapit as an internal function and thus the cash crisis didn't surprise the company management.

The main sources of finance were the own wallets of the entrepreneurial team, Antti Piippo as a business angel and later Durlacher as a venture capitalist company. The money gathered from the first round was between 7-8 M€ and thus the company valuations were around 30 M€. Durlacher set in the board several bankers, which weren't that, helpful. According to the interviews this relationship was somewhat problematic. This is not the ideal case described in venture capital literature.

The management team was exceedingly experienced. Antti Piippo as a business angel gave confidence to investors about the quality of the board. The company never saw the management team experience as a hindering factor of Wapit, either. Pekka Palin (10.2.2004) says that even with many experienced business managers in the board the technology orientation took a great part of discussions of the board. Everybody was so astonished by the possibilities of this new technology, which seemed to be certain to change the world.

Entrepreneurial Insides

According to Pekka Palin (10.2.2004) Wapit could still exist if the costs had been evened out with revenues. The company could have been founded later because the technology was genuine and still useful. Palin could found a company also later but he has learnt to commit to memory the product he is selling. As a single most important factor in the bankruptcy of Wapit Kannel Gateway project was mentioned. That tied up the R&D staff for a long period of time and no significant results was made out of it.

5.6 Riot Entertainment

Background Questions

The company was founded on the1[st] of January 2000 under name Intelligame Oy. Jan Hellmann was the first chairman of the board of directors with members: Pasi Marjamaa, Juha Hakala, Kare Hellen, Jani Halme and Henri Korpi. As a defined industry the company stated mobile content service development, promotion, and sale. 20[th] of March same year they got an investment from the Nokia Ventures risk capital company. Soon after, 4[th] of April 2000 Epartners, a risk capital company, invested in the company and they changed their company name to Riot Entertainment, though they kept Intelligame as an auxiliary business name. 8[th] of May of the same year Petri Korpi entered the board of directors. 6[th] of October the same year they made a stock split and an increase of the capital stock. 5[th] of February 2001 they established an option program for the management which was approved by an extraordinary company meeting 19[th] of June 2001. The company was bankrupted 20[th] of March 2002.

Riot had a global vision. The product aimed for the global distribution of mobile content. The company made the best revenues in Asia and it had direct investments in marketing operations in London, Singapore, and Silicon Valley. The company employed 120 people at most but the average was close to 60 employees.

Failing Revenues

The product was a distribution system for the global content. Content production was totally outsourced to others. The distribution system was fully operational and saleable in those areas where they were set in. In that sense the product strategy was not a failure. It sold a system with high know-how and service.

As an international operations mode it employed direct exports. It approached the telecom operators itself, which then sold the content to end-users.

Asia and Europe were the primary market regions. Investment wise Europe was the largest, but revenues distributed quite equally among those two.

The earning logic was based on royalties and other types of revenue sharing. The earning logic was well functioning in the sense that if European markets had pulled as much as they did in Asia cash-flow financing would have been possible.

Relations to intermediates, i.e. telecom operators worked just fine. No major difficulties were encountered in marketing activities or difficult contract negotiations. The only hindering factor in the context of intermediates was technique. Some operators were deploying the new network equipment slower than others. That made the sale of sophisticated products more challenging.

As major customers Riot had all the large European telecom operators and few of the largest in Asia. The customer strategy was to reach the lead customer in the target market. This, nearly always, meant national telecom operators. The end-user potential was the highest within that group and therefore it was a logical move for Riot.

Advertising was based on the content licenses, which were under the possession of Riot. For instance, the company had negotiated exclusive rights to sell the Lord of the Rings mobile content to their customers. As other strategic partners they had, for instance, Marvel and Fox. For those licenses the company paid the negotiated sums. In more detail the Lord of the Rings, which cost far less than Marvel, woke the most interest among customers. Riot trusted those brands, and its own name was irrelevant in advertising.

Escalating Costs

The front weighted costs of growth were one of the major factors in the escalation of costs. People were employed rapidly and in large numbers. They went almost directly to the R&D department, which was a single most important cost component of Riot entertainment. Distribution system development was costly and even at the start of the project the company management knew that the existing capital resources were not sufficient. What increased the costs was that the R&D had to made the market in time.

As an illustration Kare Hellén (11.3. 2004) mentions that the project was like establishing a US-wide movie theatre chain in a year.

Internationalization costs of the company were smaller than the costs of R&D. The company established a few country subsidiaries mainly to be responsible for marketing and system service, but costs from those weren't a large piece in the cost structure. Even though the actual direct investments in those markets were small, the travelling expenses were massive. Almost a third of whole personnel were travelling frequently in business class.

Managerial Challenges

Communication inside the company functioned well. The sales knew what the R&D was doing. The vision was clear to the whole company and everybody knew why they were employed. Production and R&D were the most productive units.

As financers the company had Nokia Ventures and Carlyle Group. The company bankrupted because of a cash crisis. According to the interviews, the financing of the company was messy and the bankruptcy was described as "ugly".

Entrepreneurial Insides

The most important factor in the bankruptcy was the timing of the company. The technology was completed before the handsets were even close. In 2000 nobody in the company believed that hardly anyone even in 2004 has 3G phones. The technology was assuming a much faster equipment development.

The company could have made it through the crisis if the company had been put on a stand by. That would have required lay-offs for nearly 90% of the staff. An even better option would be that the company would have been established later.

The most important lesson in the Riot Entertainment venture according the Kare Hellén (11.3.2004) was that production needs professional managers. Creative people are a necessity but they need guidance and down-to-earth realism in their work. In spite of this experience Kare Hellén would, even today, start Riot all over again.

5.7 Audicode (V3 World)

Background Questions

The company was found on the 9th of March 1999. Its branch of business was defined as software development, sales and consulting. 3rd of November the following year Jari Yli-Hietanen was nominated as the company CEO. The board of directors had three members: Sheik Mohamed Afzal as chairman, Nicola Jane, and Sheik Shoaib Afzal. 19th of October 2001 the right to sign the company name was given to Kaj Westerberg. After five months the company was declared into bankruptcy 22nd of March 2002.

Actually the company was founded few years earlier under the name Audicode, even though the company register didn't show the information. The company developed a WAP gateway and shared that with a trial licence over the Internet. That became very popular and many venture capital companies were interested in purchasing the company. The team of founders (2-3 full timers) were quite cautious to sell. However, V3, a UK based software house, made an offer that the management team couldn't resist. The company moved under a new business name soon after.[28]

Failing Revenues

The actual product was software development service. They produced software that their clients ordered and tailored those to their needs. To increase their reliability in the markets they entered into a project to develop a WAP gateway. Their need survey

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[28] Later in this chapter the initial phase will be referred simply as Audicode phase and commensurately later phase as V3 phase

showed an increasing interest towards such a know-how. Nokia had a similar product for freeshare for a short period of time and when that ended, Audicode was at the right time on the markets. The founders admit that they used Nokia's version as a benchmark for their product. In a later phase of company development, the V3 tried to achieve a mobile office. The gateway technology was one of many features put into that.

As operation mode the company used virtual market places. In a way they sold directly to customers around the globe, but they had only had a presence in Finland and in the Internet. This combination of indirect and direct sales modes has been impossible before the Internet and it is still quite rare in spite of the possibilities. In the later phase of the company development exporting to leading global operators was the main operation mode.

As said the markets of the product were truly global. No market was targeted as primary but sales reached the most distant markets in the east (e.g. Indonesia, Australia etc.). The distance of the markets didn't affect the sales of this born global. In V3 phase, too, the markets were global.

Pricing of their products was based on licensing the know-how. The initial way of doing business in Audicode phase was to hook a customer with the free gateway and make it also purchase services. Later the gateway was sold as a trial license and full rights to the product cost 2000 euros per licence. Some time before the bankruptcy in V3 phase the Finnish sub unit were told to concentrate on further development because at the time investors liked to see high growth figures instead of turnover.

No intermediates were used in the initial business of selling WAP gateway. Services were also sold directly. In the V3 phase operators became intermediates of this idea of a mobile office.

As customers the initial company had new media houses and operators. The interviews indicate that at the time Nokia was the only competitor and this technology was not provided by telecom operators. Operators remained the most important customers after the Audicode phase.

As advertising medium the Audicode used discussion forums in the Internet. This turned out to be quite useful. The developers that were participating in the conversations in those forums quite often recommended Audicode's products to their companies' decision makers. Audicode also managed to get its name into a developer's book about WAP. That turned out to be a success coincidence for Audicode. Many found Audicode's name from the book. It even helped tremendously to have references in alphabetical order. Audicode appeared to be the most important reference in that context.

Escalating Costs

The growth really kicked off in the V3 phase of the company. The investment horizon moved much further in the future and the growth of personnel was massive. The idea was to make a comprehensive mobile office solution and the cost was not an issue. Profitability was a secondary target compared to growth.

Costs of internationalization were also quite large. Offices were established around the world and personnel were hired from both the home country (more accurately home countries) and locals. Boosting the image was the main target of those foreign subsidiaries. Moreover, closeness to customers was an important factor in decision-making.

The elevation was important to V3 world. V3 headquarter was based in expensive surroundings in London, furnishing was planned by high-end designers and final touch procures were paid careful attention. Customer presentations were also finalized with care. Because the products weren't ready, the company used only screen shot images to illustrate the functionality to customers. The actual products were not even close to being actually sold (as an exception there were some partial products that could have been sold, for instance, as the WAP gateway of Audicode).

As said above, the R&D had a long-term focus in planning. Aiming for profitability was banned from subsidiaries like Finnish R&D unit. Long-term development was better for the purpose of escalating growth prospects in the eyes of the investors. The same also goes for outsourcing. Everything should be made by V3 it self, as then the value of the company would have been greater in the future. As mentioned, the R&D never finished. Partial components of the mobile office were ready and functioning, but the whole was not even close to generating first revenues.

Managerial Challenges

Managing the V3 complex was well done. The vision was clear from the top to the shop floor and communication was interactive and worked both ways. Physical distance, however, made communication a bit more challenging than it would have been in a single country, but it was done efficiently in spite of that. Personnel relations were smooth and functional both in Finland and in UK.

The bankruptcy was declared due to the cash crisis both in UK and in Finland. The high burn rate metabolized the invested capital far before the company was able to generate cashflow financing to cover expenses of this huge company.
The company could have made it through the crisis by focusing on profitable components of their business. Massive cost reductions would have been a mandatory operation to the company. A single most important factor in the bankruptcy was the ludicrously high burn rate, which was caused by huge R&D and growth costs. Another thing that was fatal for V3 was that markets weren't ever ready for their products. The concept of a mobile office was hard to sell for clients at the time when the handset technology wasn't ready for them. Nokia or Microsoft had the power to push new technology forward, but they had other things under their focus. For a newcomer like V3, that proved to be impossible.

Entrepreneurial Insides

The company (Audicode) would have been also founded after the burst of hype. As a matter of fact almost the same team operates in the same field of business under a different business name. Too ambitious targets that V3 set for itself were fatal also for the Finnish subsidiary.

As a lesson learned from the venture, the entrepreneurs say that trusting your own instincts is the way to go. Nothing is ever as good as it might first appear. In this context the promises of V3 were too huge and the entrepreneurs could have read the signs of disaster before entering in the venture. Once they were in they had no strategic responsibility and therefore they cannot be blamed for those mistakes. One thing that also became evident was that in gambling there are also gambler's risks. The development of a killer application has, of course, huge expected gains, but the market risks are enormous.

5.8 Taika Technologies

Background Questions

The company was founded 20th of November 1999 by Sami Sunila, Niko Punin and Taneli Tikka. The company was in the ICT programming industry. On 31st of March the company made a 1/10,000 split in their stock face value. On 9th of May 2000 the company equity was under half of the capital stock. However, that state was declared to be only temporary. At the same time Reijo Luostarinen also joined the company board. By special issues 22nd of May and 19th of June, new investors, Hybrid Holding, Sitra and Stratos Ventures, took a foothold in the company 11th of August 2000. 16th of January 2001 a stock option program was approved by the company meeting. The company meeting also approved a new stock option programs on 13th of February, 19th of June and 27th of September 2001. 15th of May and 12th of November the company by-laws faced minor technical changes and an auxiliary business name of Taika Oy was taken into use. 16th of July 2002 Tuomo Airaksinen resigned from his post. The bankruptcy was declared 28th of August 2002.

The company had a global vision according to Reijo Luostarinen (7.2.2004). It planned to enter all the major markets within a decade, i.e. Taika Technologies was a born global. The company employed at its best up to 40 people and it employed 27,000,000 FIM of capital. At the time of the first round of financing the company value was 100,000,000 FIM. The company had a global presence thanks to its strategic alliance partners. The company's revenues, however, came mainly from Europe.

Failing Revenues

The product was virtual community. The R&D phase of the product had taken place since the 80s in the minds and in the use of the entrepreneurs. It only intensified after the establishment of Taika technology. Pilot marketing and sales efforts took place soon after the establishment, namely 2001 and 2002. The competitive edge of this product was that it didn't slow down when more users joined in. This was due to the patented technology of sharing computing time from users' own computers. The company had direct competition, but with inferior technology where the computing capacity of the master computer set limits to user amount. Taika's product had no user limits. This kind of product is missing even today from the market. The product had so many options in which to utilize it that the market focus was a bit unclear. However, this would not have prevented the bankruptcy but perhaps lengthened the death struggle of Taika.

The mode of international business was strategic alliances. In this context a strategic alliance meant joint fairs, promotional presentations, and most of all valuable contacts. This mode selection minimized the costs of internationalization but nevertheless gave a presence in every lead market for a small born global. This network functioned as planned but no sales were generated through those alliance partners.

Market selection was quite traditional for a Finnish company. Taika soon understood that it had to gain experience from Finnish markets before it could sell its products, for instance, in Korea. However, the first paying customer was BBC from the UK. The logical reasoning behind this choice was that problems with the pilot phase product would be much easier to fix in Finland than in, for instance, Korea where Taika had started negotiations with local Samsung.

Pricing of the product was basically value based. The company tried to negotiate a deal with its larger customers to cover almost all the expenses of Taika, but the price was in every case decided separately according to the customers' needs. Because of the wide market, Taika used as the earning logic licence sales and royalties depending on the project and business area that the product was utilized in. In case of cashflow financing, the company would probably have suffered losses while learning pricing policies, but Taika was in affliction to get any sales at all.

The intermediates of Taika were its strategic alliance network. However, they weren't responsible for any sales but they maintained the visibility of the company as such. Mainly they organized opportunities to young entrepreneurs to present their product to their networks. The strategy alliance partners is discussed in more detail above in the international business mode paragraph.

The customer strategy of Taika was to target straight to leading customers. Large negotiations were started with, for instance, Nokia and AlmaMedia, but those didn't proceed as planned. With Nokia Taika fought against the "not invented here" attitude while Nokia itself had spent a large amount of its research capacity to develop a similar product that Taika had already done. According to the remorse Nokia had spent over 150,000,000 FIM to develop the same type of product that Taika already had. If Nokia's line management had agreed to take Taika's product, that would have meant the same as acknowledging the errors made in Nokia's development department. Taika extended the deadline of the offer three times until the summer, but the purchase decision never took place in Nokia or in AlmaMedia. That was the deathblow for Taika.

The advertisement and sales promotion were coordinated through the communication manager. The media that were occupied in promotion were mostly fairs, promotional presentations and face-to-face communications. The challenge was to convince the customers about the superiority of the product without confusing them with too difficult technical vocabulary. Therefore the sales efforts started at the high-end management, but the technology line management soon became responsible in the negotiations. The media used seemed to be the most efficient for Taika.

Escalating Costs

A sharper product focus would have decreased the maximum staff from 40 to 25-30 employees. However, that would have lengthened the life of Taika only by half a year. That wouldn't have prevented the bankruptcy because the market situation had got slightly better only in the spring 2004. Taika would not have lasted that long even with a sharper focus and a smaller staff.

Costs of internationalization were kept as low as possible. That is seen in choices of international business mode as well as market choices and intermediates occupied. Travel expenses for negotiations in South-Korea (for instance Samsung), and Japan Luostarinen paid himself when he had other responsibilities there. No direct investments were made to other countries in such an early state of company development. That is one of the reasons why Taika lasted as long as it did.

The young entrepreneur team of Taika showed a maturity to be humble and didn't raise their salaries after the first round of financing. Taika didn't purchase any cars nor did it invest largely in the elevation of the company. Therefore the company didn't go bankrupt because of extraordinary administrative costs.

At the beginning of the company's life nearly all the costs were somehow R&D-related. However, soon after the balance changed so, that the sales efforts cut a 30 % share of total budget. R&D was in schedule and as a matter of a fact pilot version was already sellable for the customers. By those sales the company would have generated cash flow financing by which the company could have survived.

Managerial Challenges

The team of entrepreneurs were technology-orientated. However, soon the company got Reijo Luostarinen, a business academic, running the board and by that they managed to pucker up the gap in business knowledge. They established an effort to train themselves with a program called Taika Academy. For instance, Luostarinen held four sessions about internationalization of the company. The company also gathered together an advisory board, where they could gain knowledge and instruct them. In 2001 the company started to search a new CEO with a stronger business background than the company entrepreneurs had. From six candidates Risto Savolainen was pointed for the job. The CEO could have been selected sooner, but the product development was in such a state earlier that this would probably have had no effect in the bankruptcy of the company.

As threats the company saw before, e.g. bankruptcy, the dependency of a few investors. Sitra and Stratos Ventures came in with a 20,000,000 FIM equity capital and with that they got a 10 % share of votes each in the company meetings. Thus the company value was estimated to be 100,000,000 FIM. The deal was negotiated in 2000 just before May 2000 and registered in the archives in August. The second round was planned to be held in 2002 to finance product commercialization. The company estimated to get a deal with similar conditions in 2002 but they also thought that the income financing would be enough to maintain the company.

As weaknesses the company saw the business experience of the entrepreneur team and variation in earning logic. Earning logic variation, as said above, was due to a lack of product focus. The product also seemed somewhat doubtful, because these kinds of killer applications are extremely rare and without the technological background it was hard to be convincing. However, the entrepreneurs swore to it and the product technology was moved as one of the strengths of the company.

At the time when the initial SWOT analyses were made, nobody saw the coming threat of failing demand. The market feasibility studies were not made, but those would have been difficult to execute in case of this product. The demand of these types of products is latent and the potential customers would be hard to find without revealing any vital business secrets. At the beginning the interest towards this product was wide and many were considering purchasing Taika's Product. According to Luostarinen (7.2.2004), all customers' investments in technological products halted after May 2000 and they are only now catching up to normal market demand level. The information markets are always incomplete. An external bookkeeping agency was responsible for accounting practises. That caused little deceleration in reporting, however, which didn't cause any surprises. Sami Sunila was in the management team among other founding team members and was responsible for finance. They planned to hire a finance specialist after the first revenue flows. The cash crises of the days of the beginning were fixed by investments made by Luostarinen and Sunila. After the first round this wasn't necessary.

The relations to main financers went sour soon after the first round of finance. The conditions weakened the position of Stratos Ventures, and thus the climate in the board was dense. Stratos had several representatives sitting at the board of Taika. They knew little about the business of Taika. They didn't even have time to learn it, because soon after another representative came in their place. Sitra's representative only sat in the meetings and didn't suggest anything. He seemed to be only a controller that monitors the situation and objects when the situation needed it. That could have been done differently, because according to the finance literature the investment of a venture capital firm is both money and business know-how. The second phase failed because Stratos was willing to invest only 4,000,000 FIM to the majority of the shares of Taika. That would have meant a decrease from 100 MFIM to 13.3 MFIM in the company value. These four million marks would not have saved the company for long, anyhow and the motivation of the entrepreneur team would have diminished significantly.

Entrepreneurial Insides

Taika could have been founded after May 2000. Even better would have been to have it established already in 1997 or similar. The similar products haven't come to markets yet, so the establishment of Taika would be possible even today. The only period of the dark years would have been from May 2000 to fall 2003 when the time would not have been suitable for the establishment of Taika.

Reijo Luostarinen (7.2.2004) said that the main reason for the bankruptcy of Taika Technologies was failure of demand. The long negotiations seemed to go nowhere and the financing of the commercialization was impossible. The business ended in a technical bankruptcy when the equities weren't sufficient enough. The company was driven down by a decision of the majority of shareholders, namely the founding team. The only loss was the initial investments and all debts could be covered besides one.

5.9 360.com

Background Questions

The company was founded 1st of August 1994 with the name Publico Kustannus Oy. The industry where the company was designed to be was publishing magazines and books. In the first board of directors sat Petri Charpentier, Eero Iloniemi (chairman) and Simo Järvinen. Next year May 14th the company changed its account year to be the same as the calendar year. 15th of October 1999 the company changed its name to MediaShop Oy. As a business field internet emporium governance was also added. 10th of January the company changed its name to 360.com. The field of industry was contracted to cover only internet emporium governance. Jukka Järvinen took the chair of the company at the same time. The company moved to other facilities on 12th of June 2000. At that time the company made a split, raised their capital stock and the annual meeting gave the authorization for the board to develop an option program. 18th of January and 22nd of September 2000 the company held a meeting concerning the emissions. 9th of June 2001 the company was declared bankrupt. The largest debtors were the tax authorities and Tekes.

360.com had a global vision (Mika Järvinen 22.3.2004). Global markets were planned to be reached in the near future. The company employed 30 people at its best and it had operations Europe wide. The company did not have any global sales, and direct investments were also made in Europe.

Failing Revenues

The product of the company was a comprehensive system for media logistics. The purpose of the system was to make it possible for media houses to reserve a medium space and find useful content as well from a single resort. The infrastructure of the product was based on the use of secure internet. The product was a kind of complete interface solution for media house purposes, i.e. media house office software. The software never reached a functional pilot phase. Another thing that hindered the progress of this product was that the media didn't give integration rights in their own systems. That was a kind of "not invented here" problem. In addition to this high know-how business the company was involved in conventional media house activities. Those were naturally sellable from the beginning, but they increased costs and broadened the focus of the company.

International operations mode of the company was direct export. They made direct investment in one marketing operations unit in Sweden and they had a strategic alliance partner in India making software. Their plan was to own as much as possible from the value system and therefore they emphasized a direct export mode.

They were simultaneously entering in many European markets. They had media house contacts in Estonia, UK, Germany, Hungary etc. Market differences were acknowledged, but localization of the software was no big issue.

Earning logic of the company was based on the market standard, i.e. conventional service sales. The revenues came from the marketing budgets of the client companies. As said previously, software was never completed but licensing was the planned form of pricing in future business.

Customers, i.e. media houses, were very interested in the high know-how product. They pushed forward to ensure that they'd get the technique once it was completed. As a matter of a fact the future customers played big role in financing 360.com.

Advertising 360.com's products was mainly based on personal relationships. The brand was heavily utilized to make an impression of complete solution (360 degrees in the media circle).

Managerial Challenges

The company went bankrupted because of a cash crisis. Even tough the accounting practises were externalized the crisis was prominent. The company management cut the costs and didn't raise their salaries, but that was not enough. Some running costs were still inevitable and those were the final stroke to the company.

Managerial communication was basically well in place and the vision clear. However, some problems were generated because of two strong managers, who had conflicting ideas about how the strategies should be implemented and this caused some extra costs through inefficiency. Another weakness of the company was that they never stopped and asked why something was done in the way it was.

Financers of 360.com were Tekes, customers in media field, EVLI and later, Stratos Ventures. The first round of financing was made by direct investments to equity capital. Later the company also got financing in form of convertible bonds. The entrepreneurs of the company would have hoped more active involvement from the venture capitalist side. They participation in company management was nearly only at an observing level. They didn't introduce any business development ideas.

Entrepreneurial Insides

As the most important reason in the bankruptcy of the 360.com was the lack of technological know-how. They realized that it was difficult to purchase the technology and they cooperated with a partner that didn't have any real resources to execute the given tasks. Cooperation with the Indian partner was better, but the money spent in the first year never paid back. The cooperation with the first partner could have been cancelled earlier, but the technology management of 360.com waited for one year for results that never came.

The company could have made it through crisis if they had sharpened their focus. Mika Järvinen (22.3.2004) admits that the product was too challenging for a small start-up company. Step-by-step product development would have made it more likely to survive than the all-at-once approach.

As lessons learned from this venture the entrepreneur states that there is no such thing as a self-directing organization. A small company should concentrate on the essential, not try to achieve everything at once. A sharp product focus is a mandatory strategy tool for SME. The board always needs realistic, down-to-earth people. Those make visionaries think more thoroughly about consequences of their decisions. "Ask why more often" stated Mika Järvinen (22.3.2004).

6 Cross-Case Analyses

The cross case analyses are conducted in order to make generalizations about the cases. The purpose of these analyses is to illustrate similarities between the bankrupted companies, different groupings of the sample and confirming the POM$ICA-model.

The first part discusses the most common reasons why the sample companies have failed. Those reasons are called the fatal five according to the number of main reasons for bankruptcies. That tries to create a list of critical issues that might cause a bankruptcy.

The second part concentrates on grouping the sample in three subgroups, which have common features among them and differences to other subgroups. It might help entrepreneurs in their strategic planning if they are able to identify themselves in one of these groups.

The final part concentrates on illustrating the strategic dimensions of POM$ICA in these bankrupted companies. That follows the academic tradition in born global studies and makes it easier for a future researcher to compare bankrupt born globals with more successful ones.

6.1 Fatal Five Reasons

According to the interviews the most common reasons indicated were unclear focus, market components, technological challenges, strategic rigidity and financer relations. Those factors are explained in separate paragraphs below. The table below this paragraph illustrates which companies suffered from which reason. Some companies had several reasons and they appear in multiple cells, however, one major reason is identified for each company.

The order of appearance for reasons is the frequency of them. Even though case reports might seem to conflict between this list of reasons, it is mainly caused by a different perception of the same thing. For instance, some interviewees reported several major problems behind the bankruptcy, but still mentioned smaller detail as the most important one.

Netbeacon and Audicode are under their mother company name, because the mother was responsible for making strategies. Therefore the initial business names are in brackets and not vice versa as it has been previously in this study. The order of reasons is based on the hit ratio of each reason. Company names are in alphabetical order with the exception of minor reasons for one company. Those business names are in italics and after other company names.

Chart 25 Fatal Five Reasons

Unclear focus	1. Reach-U Solution (Netbeacon) 2. V3 World (Audicode) 3. Wapit 4. 360.com
Incompatibility of Market Elements	1. Taika Technologies 2. Vista Communications 3. APC Attoparsek 4. Grenwill
Technological Tribulations	1. Riot Entertainment 2. 360.com 3. Wapit
Strategic Rigidity	1. APC Attoparsek 2. Vista Communications 3. Riot Entertainment
Breached Financer Relations	1. Grenwill 2. Taika Technologies

Unclear focus in this context means negative impact to business by a company's incoherent business vision, business idea, business mission and its internal communication. In four companies interviews these came up most strongly. In these companies the management tried to develop multiple products or product combinations for several markets simultaneously. That caused pressure even before scarce resources. That deepened and lengthened the death valleys of the companies. In cases of Reach-U Solutions and Wapit the lack of focus was caused by weak internal communications. Sales personnel and R&D personnel had different views about the company vision and thus they were pulling the company to different directions. In the cases Reach-U Solutions, V3 World and 360.com these companies were trying to develop such sophisticated comprehensive packages that it would have been a miracle to complete the final product. However, in the hype it was common to try to develop everything oneself, because it raised the expected returns significantly. But according to the finance literature higher returns mean higher risks and for these companies the gamble didn't pay off.

Incompatibility with market elements in this context means comprehensively problematic relations (non-technological) to intermediates, customers and other market interest groups. For instance, the Taika Technologies and APC Attoparsek collided heavily on the not-invented-here phenomenon with their target customers. That means in context of these cases that customers wanted to develop the technology themselves even with a higher price. This doesn't necessary mean that it was a strategic decision by the customer companies, but an overall reluctance to make a deal with an outsider. That reluctance might be caused by fear of admitting that somebody has done the same thing better than the other and/or cheaper. In the case of Vista Communications market development made its products obsolete. The company wasn't prepared for the low cost technology of convey conference calls over internet. The market didn't appreciate their technology either as much as they had anticipated. It turned out for them that a moving picture of the person you are discussing with was not worth their price. Customers preferred to meet their contacts in spite of the higher cost. In regular short conversations voice is sufficient. In case of Grenwill they had major difficulties in making deals with telecom operators. The operators demanded far too great a fraction of revenues that would have made the business profitable for Grenwill. Revenue sharing in their context meant that operator gets the largest piece, government second, and what is left is divided with a customer and the company.

Technological tribulations mean unsurmountable challenges in customer and market capabilities to produce or utilize technology that is needed for a company to carry out its business mission. Almost every case company reported that they had problems in their R&D. However, that was not a reason for failure for any of these companies. In the case of Riot entertainment the company had its technology up and running in time, but the end user technology didn't advance in the same momentum. That meant that it was impossible for the end users to purchase the multimedia products through Riot's distribution system. Wapit encountered similar problems. They had everything ready for the extensive use of wireless services, but wap 1.0 turned out to be substandard. SMS-based products, however, functioned technically as planned, but customers found it difficult to remember the phrases and numbers. 360.com was the only company that tried to outsource the core technical development. This turned out to be a mistake for them. The initial partner had no such capabilities to produce the software they were supposed to do. That is one reason why 360.com's product never reached the markets.

Strategic rigidity means a company's incapability to change direction according to the changing perception of market environment. Many companies found out that there were no markets for their products. However, APC Attoparsek was the only one that had a clear focus and it didn't still reach their customers. The interview clearly indicated that the company should have had a second back-up plan if the markets didn't boom. Vista Communications was profitable for a while, but it didn't act when the first indications of market technology change were visible. They stubbornly tried to push their technology forward. They tried to change their business idea, mainly product portfolio from studio hardware to video codec software, when it was obvious that their video communication studios didn't sell but that direction change came too late. For Riot Entertainment it would have been possible to survive if they had put their business on stand-by and waited for the market technology to develop to the point where their technology would have become useful. However, they were reluctant to do so.

Breached financer relations mean negative impact to business by financing contracts, personal chemistry with a financer, received amount of capital, financing rounds, shares of ownerships and a financer's participation to governance. It would be unfruitful to discuss only the adequacy of capital, because all of the case companies named that as one of the reasons. However, more interesting is the fact that nearly everybody, and a part of Vista Communications, said that representatives of financers in the boards didn't have any expertise to add in governance or extend a born global company's social networks. Some even said that their behaviour in the board was unprofessional. Reach-U Solutions was built around one large financer, Conventum, and therefore it is unique in the sample and doesn't reflect the most common problems between born global companies and their financers. Grenwill seems to be most affected by bad relationships between the financer and entrepreneurs. The financer made the business impossible for the company and it seemed to leave the company adrift when the former chairman resigned. They had not even replied in the questioning made by one public financer and therefore their application was rejected. Grenwill's bankruptcy is complex and it is still in court, where the financer and other counterparts are accusing each other. The financer of Taika Technologies also got cold feet in the burst of hype. They made an unfair offer of finance continuation. The financer would have got the majority in the company with an insufficient sum of equity. That entrepreneurs and business angels found this unacceptable. With a good second round of financing the company could have reached the commercialization of their products and tried to find markets outside Finland. A notable fact is that in Taika Technologies they agreed with the financer that the first round is totally used in R&D and the second round in future would be for commercialization. In every case except in Vista Communications, the majority was in the hands of entrepreneurs and business angels.

6.2 Categories of Bankrupted Born Globals

The study indicates that there are three groups of companies, which have bankrupted differently. Those groups are product failures, market failures and partner failures. Next the study discusses each in separate paragraphs. A distinction of categories and fatal reasons is that reasons are static explanations for the bankruptcies, whereas the category approach illustrates the dynamics in bankruptcy processes. Below is a table, which illustrates which companies are in which group.

Chart 26 Three Types of Failures

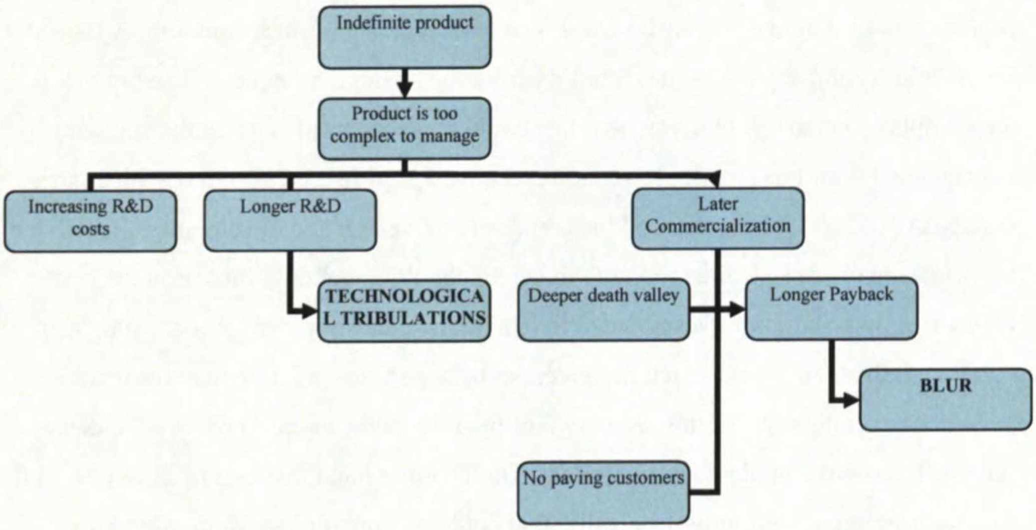
Product Failure	• Wapit • 360.com • Reach-U Solutions[29] • V3 World
Market Failure	• APC Attoparsek • Taika Technologies • Vista Communications • Riot Entertainment
Partner Failure	• Grenwill • Netbeacon

[29] These companies are in *italics* as they were not in the main target sample of the study. However, in cases of V3 World and Reach-U Solutions evidence indicates that bankruptcy reasons are in overall focus.

	• Audicode

Product failure in context of this study means a type of company that has severe problems in finding the precise business idea to execute its business mission. A typical focus failure company bankrupted starting from the strategic weakness. The product is too complex to manage. One way that this could have occurred is when the company management didn't trust a single version and aimed at pleasing customers with a large variety of products. This increased the demands of research and development, which led to increasing costs. Extended research in core technology not only increased the cost component in prices, but it also tended to lengthen the development process and, later, commercialization. This also led to longer payback periods and deepened the death valley of the company. All this led to two of the five fatal causes. Those were either unclear focus or technological tribulations. On the other hand these companies played it safe with strategic flexibility. Ironically, that could be one of the reasons why those failed. This group is called focus failures.

As illustrated, in the case of Wapit the biggest mistake was to try to develop Kannel Gateway alongside with their sms-services. The gateway was such a challenge that a small company had no realistic chance of completing it with given limitations of their resources. 360.com also tried to develop a comprehensive package of market promotion software. They had to outsource a part of development to an outsider, but still the task to cover all different types of market promotion media with a single software was too ambitious. In addition to that they established a new media company in both Sweden and Finland, which was their target customer group. That didn't facilitate the company to reach its scale through scope. Reach-U Solutions was a complex mixture of different types of small high-tech companies. According to the interviews, a single combining factor among these companies was the financer, Conventum. These small groups tried to develop their own technologies. Ever-changing company management corrupted the vision and small units didn't know how their effort would fit in whole. The whole was some sort of mobile office, a complete package of mobile application software. Besides Reach-U Solutions, V3m too, had a vision of a complete package of mobile application software. It acquired many smaller units in its alliance. Everything they tried to develop had to be in-house and the company didn't care for small partial products. That was reasoned by aiming for higher revenues in the future, but a gambler has gambler's risks. The broad focus didn't recompense.



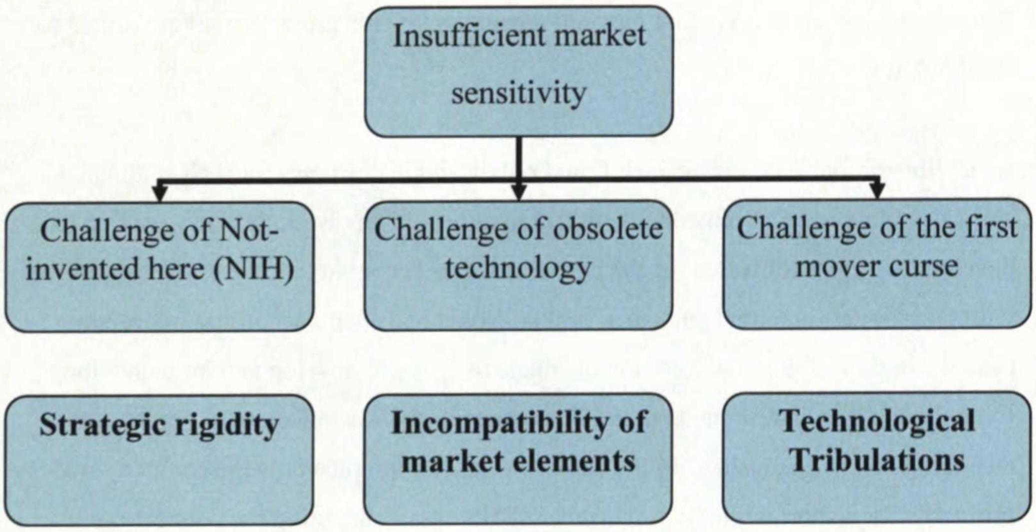
Market failure in this study means a group of companies that didn't find customers, intermediates, or markets to their products. This might be caused by the not-invented-here phenomenon[30], an incompatible customer or intermediate technology, or by an unpredicted and unprepared substitute, which makes the company's product obsolete. As a distinction from the focus failure category this group had a clear product focus. It was able to complete commercial versions and hit the markets. However, for some companies finding customers proved too difficult and for some market need for their products faded away. Another feature in this group was that for some, the technology was too advanced for the markets and they couldn't find customers for their technology, because there was no possibility for the end users to utilize it. This could be seen as the

[30] In business professional jargon this phenomenum is known shortly as *NIH.* This was quite common in high technology companies that were in business-to-business markets. For instance, see cases Taika Technology and APC Attoparsek

first movers curse vis-à-vis first movers' advantage[31]. This group is market failures (see chart below).

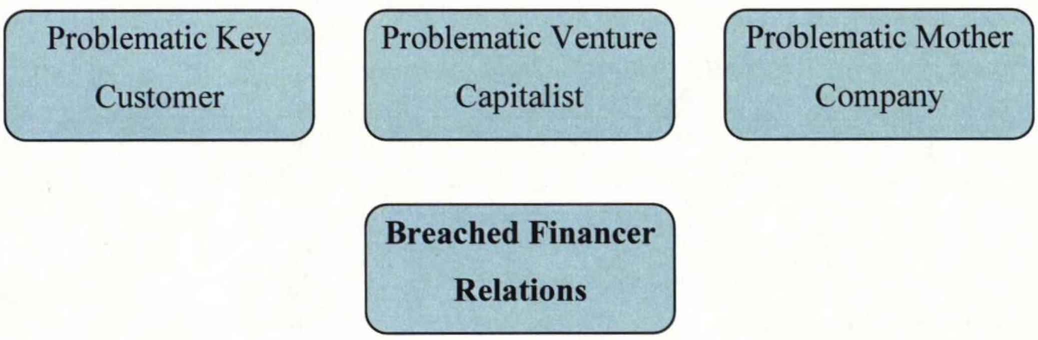
As an illustration, APC Attoparsek found only a single customer for their trading software. The product seemed to be useful in almost in any bank, but they wanted to develop their own softwares for the purpose. Taika Technologies had similar problems with their largest potential customer, Nokia. Nokia had spent, according to hearsay, nearly five times the initial investments made to Taika to develop similar technology. Even though they hadn't made it, the line management was reluctant to purchase the technology from an outsider. In the case of Vista Communications the company was profitable for a short while. In times when ISDN was dominating the connection technology, the company was able to create functional connections for video conferencing and video negotiations. The technological development drove past and expensive video studio equipment came obsolete. The company wasn't able to react to this development fast enough. In the case of Riot Entertainment the product was also functional before bankruptcy. Telecom operators as intermediates made deals with them willingly. However, revenue share based prices didn't create enough working capital, while end-users didn't make the media content purchases from their channels. This was because the end-users' technology didn't advance as the company expected. There were no markets for their products.

[31] This means that a developer of new technology doesn't find customers and after markets open for their products, competitors take the advantage over the company's market work. This is the other way around in economics literature where old-fashioned industries benefit from penetrating the market first. The difference is in challenge of communication.



Partner failure means in this context of born global bankruptcies a detrimental relationship to the largest customer or financer. At the time many small promising companies were acquired by the larger corporation, not because of their excellent business mission, but for the talent of the research team. The business mission of the previous company starts to fade and the problems of the large corporation seem to be a deathblow to born globals acquired. Another relationship that seemed to be present in the media and in informal discussions with venture capitalists was a dependency on a single large customer. However, this didn't come up in the interviews. Lastly, harmful relationships developed between the venture capitalist and a company. After the bubble burst, many financers had problems themselves in surviving and interest in financing in more risky born globals stopped. Even promising businesses were driven down, because of a lack of commitment to develop it on the financers' behalf. Why then did born globals seek for partners? It is evident that many potential born globals had to merge with larger companies in order to get their hands on larger resources, technologies, finance, networks, or business experiences. The entrepreneurial literature, as well as born global literature, widely discusses scarce resources of born globals. They tend to come to the conclusion that partnering in some form is the only way to seek rapid growth to foreign markets. Young entrepreneurs also need experience in the industry and the venture capitalist should bring its experience into the company and help it to develop. Because the capital injections needed or experience required didn't come from the partners, many born globals were extinct. Moreover, as a distinction to the categories above, this type of background leads to unforeseen and fast problems, as the picture below illustrates.

As illustrations, in cases like Grenwill the venture capitalist got cold feet, when the decline started, and made the business development impossible. In spite of a legal power in the company, which was still in hands of entrepreneurs, the true power in the board was in the financer's possession. Grenwill had chosen the financer because of its expertise in the former's business field and its large personal networks, but after all it got nothing out of it. In cases of Netbeacon and Audicode the small born globals merged with larger companies. Tempting cooperation didn't turn out to be as fruitful as it initially had seemed. Netbeacon wanted to enhance its business capabilities with a larger company. However, the company growth made its own position in the company unclear and the overall focus even fuzzier. Netbeacon would have survived without merging with Reach-U Solutions (Done Corporation at the time). Similarly Audicode merged with a large European company, while the entrepreneurs wanted to develop their own negotiation power in international markets. Even though the vision was clearly stated in V3 world, the product strategy was unsustainable. Short after the merger it became obvious that the company would never reached the markets with working products. The company would have survived without their partner.



6.3 Bankruptcy Reasons Conforming to POM$ICA

As a contribution to ongoing born global research, the study will illustrate the most common features and problems concerning the POM$ICA model. These features are listed in order of frequency and after each feature there is a number in brackets to illustrate the times that the feature was mentioned in the sample. In some features the number might be larger than the sample while several features per single company are simultaneously present. All elements are also present in every case, because of challenges in the study method[32]. Problems are presented in similar manner. The table is below.

Chart 27 Bankruptcy Reasons Conforming to POM$ICA

	Features	Problems
Product	• High know-how (4) • High system (3) • High technology (1) • High service (1)	• R&D unfinished (4) • Obsolete technology (1) • Too broad focus (1)
Operations	• Piggy bagging (2) • Direct export (2) • Strategic alliances (1) • Own export (1) • Franchising (1) • Virtual marketplace (1) • No specific operations mode (1)	• Underdeveloped international operations strategy (1)
Markets	• Finland (4) • Europe (2) • Asia (2) • UK (2) • Germany (1) • Nordic countries (1) • Truly global (1)	• Small number of potential customers (1)
Pricing	• Turn Key – Value based (3)	• Royalties didn't yield enough profits to sustain

[32] See later in validity and reliability of the study in summary chapter.

[33] Tradition-based means in this context that 360.com got a fraction of the marketing budgets of new media houses. It is quite similar to competition-based in the sense that it follows actions of its nearest need competitors, but prices differently because of its technology.

	• Know-how licenses – Value Based (1) • Royalties – Value based (1) • Combination of royalties and monthly fee - Value based (1) • Various earning logics – Value based (1) • Direct sales – Tradition based[33] (1) • No clear pricing strategy (1)	the business (3)
Intermediates	• Telecom operators (6) • No intermediates (1)	• Unfair pricing (1) • Unsatisfactory end-user market promotion (1)
Customers	• Telecom operators / mobile end users (4) • New media houses (2) • Large Finnish multinationals (1) • Finnish Banks (1) • Leading charity organizations (1) • Finnish lead customers (1)	• Not invented here (2) • Unstable customer strategy (1) • Insufficient customer technology (1)
Advertising	• Direct face-to-face marketing (7) • Discussion forums (1) • No specific advertising plan (1)	• Misleading advertising[34] (2) • No appointed sales personnel (1)

Typical products strategy of bankrupted born globals was high know-how. In context of the born global studies this usually means licensing software or similar products to users. High system was almost as common as high know-how among the sample companies. Usually it was a combination of hardware and software or software and service. Purely high-tech products and high services are few in the sample due to the existence in the whole population. The product strategy related problems were related mainly in a too ambiguous finish of the final product, i.e. R&D didn't finish. Once in the sample the disaster problem was that the technology was becoming obsolete. Lastly,

[34] WAP was no internet.

too broad a focus in products was mentioned once, however, it was clearly present in many more cases.

As international operations modes, sample born globals utilized light modes such as piggy bagging and strategic alliances. Three mentioned direct exports or own export as primary international operation mode. One interesting solution for international operation was a virtual market place. This computerized market channel could have been utilized in any country with miniature costs compared to other types of international business modes. One company had not identified a single strategy to internationalize. It mentioned that it was one of the major problems related to its international business.

Main markets of these companies had a short psychological distance from mother country (in spite of the fact that they saw themselves global in ten years). One of the companies did see that its markets had nothing to do with national boundaries and thus they were truly global from the beginning. Once it was mentioned that a small number of customers in their target market was a problem. That increased the push forces to internationalize.

The group of born globals used widely value based turnkey projects. It thus seems that they were willing to make tailored solutions for their customers, which might indicate that their technology wasn't yet productized. According to the unofficial discussions with venture capitalists this is one of the major sins of Finnish technology companies. Other types of earning logics used royalties as one method of making turnover. Those, however, didn't yield enough to sustain the business. It seems that this earning logic is quite difficult for players in emerging technologies.

A big segment of intermediates were telecom operators. Many business-to-business companies see them as their customers and heavily push-marketed their products to them. Usually the end-users were left as a secondary consideration of customer strategy. Unfair bargains and unsatisfactory deals on the end-user marketing of telecoms were seen as major hurdles for success in the field.

As customers, again, the entrepreneurs mention telecom operators but also new media houses have come up. Clear problems were the not-invented-here phenomenon and insufficient customer technology.
Direct face-to-face market promotion was the ground of the born global sales process. Problematic issues were misleading advertising, which was mainly a problem of internal communication. Promoters promised something that engineers didn't succeed in accomplishing and vice versa, engineers didn't keep up the schedule promised. No appointed professional sales man was once mentioned. One interesting advertising model was the utilization of discussion forums in the Internet. The record of the company showed remarkable efficiency in this market promotion medium.

7 Summary

7.1 Conclusions

The study answered to research questions set in the introduction chapter. Those were 1) What are the strategy reasons in a born global bankruptcy? 2) Can the bankruptcies be divided in groups with similar behaviour? and 3) How are the reasons of bankruptcies compatible with POM$ICA-model used in similar born global studies? This is discussed below in separate paragraphs.

What are the strategy reasons in a born global bankruptcy?
The reasons for bankruptcy are unclear focus, incompatibility with market elements, technological tribulations, strategic rigidity and breached financer relations. Firstly, unclear focus in this context means negative impact to the business by a company's incoherent business vision, business idea, business mission and internal communication. Secondly, incompatibility with market elements means comprehensively problematic relations to intermediates, customers and other market interest groups. Thirdly, by technological tribulations, the study means impassable challenges in customer and market capabilities to produce or utilize technology that is needed for a company to carry out its business mission. Fourthly, strategic rigidity means a company's incapability to change direction according to the changing perception of market environment. Fifthly, breached financer relations mean a negative impact to the

business by financing contracts, personal chemistry with the financer, received amount of capital, financing rounds, shares of ownerships and the financer's participation in governance. These reasons explain the bankruptcies in the sample of the study.

Can the bankruptcies be divided in groups with similar behaviour?

There are three different types of bankruptcies in born global industries: 1) Product failure, 2) market failure and 3) partner failure. First, a product failure in the context of this study means a type of company that has severe problems in finding the precise business idea to execute their business mission. Then, a market failure in this study means a group of companies that didn't find customers, intermediates, or markets to their products. Lastly, a partner failure means in the context of born global bankruptcies a detrimental relationship to the mother company, the largest customer or the financer. As a conclusion these groups differ from one another by the speed of bankruptcy, involvement of external factors and reactions of management.

How are the reasons of bankruptcies compatible with the POM$ICA-model used in similar born global studies?

The POM$ICA model elements in the sample companies are as follows: P) Typical product of a bankrupted born global was high know-how. Unclear focus product portfolio was a common cause of bankruptcy. O) Bankrupted born globals utilized light modes of international operations such as piggy bagging and strategic alliances. Operations didn't seem to be as problematic as product for bankrupted born globals. M) Markets of bankrupted born globals were psychologically close to home markets in spite of the fact they all were planning to go global. A small number of potential customers in the target market were the problem for many. On the contrary, some of the companies rushed, perhaps too rapidly, to too many markets. $) The group of bankrupted born globals utilized mainly value based turnkey projects as bases of their pricing. Royalty solutions were used as well. The first earning logic indicates that productization was not thoroughly planned. The second royalty based earning logic was problematic because of the slow market development. I) The largest group of intermediates were telecom operators. The born globals heavily push-marketed products to them, but the market pull was too weak for telecom operators to get interested. Unfair bargaining and unsatisfactory deals were also major hurdles in succeeding. C) Telecom operators were also the end-customers for some products, but other business players, as well. Not-invented-here phenomenon was too great a challenge to overcome for many bankrupted born globals. Lastly A) a major type of advertising was direct face-to-face. Its simplicity made communication of difficult products easier. Problems in this area were misleading sales promises, which where caused by inefficient internal communication.

7.2 Implementation

In this section the study discusses indications that might have saved the companies from the bankruptcy. Firstly, it gives examples of what might help when the risk of fatal reason is evident. Secondly, it discusses how a company may change its path in a bankruptcy group. Lastly, how might the results of the study impact the POM$ICA strategy model

To avoid the fatal effect of an unclear focus, the commercialization of the product has to be thought carefully. In case of complex high know-how products, the development should be limited to the most promising version of the most promising product. Cooperation with customers is needed; however, tailored solutions tend to indicate that real decisions are avoided. Moreover, productization, i.e. packaging the product, clear categories, price classes, and customer-orientated market promotion make sales much easier. Understanding the customer behaviour is the thing to make the sale.

To avoid the effect of incompatibility of market elements, thorough analyses of the markets are needed. Sources of information are customers, rivals, market journals etc. Some entrepreneurs tend to hide behind the misperception that there is no competition and no markets for the products, but somehow similar needs are fulfilled previously. Understanding these ways to fulfil a similar need might give an inside into why a product could be a success or not. At best, these analyses give sales arguments for further meetings, but also tell if there is room for such product after all. Therefore the study recommends that need-based competition analyses be conducted even before entrepreneurs themselves invest more in the company.

Avoidance of technological tribulations might mean waiting a little longer before the launch of the product. The market for high-tech products is changing rapidly and one might never know if the direction is changed. However, this is a double-edged sword. By waiting longer before developing the product further, the company might loose the single window of opportunity to ever reach the markets. But still, results of the study indicate that being the first on the markets isn't always beneficial. The complex technology has to be communicated to several reluctant customers to make even the first deal. After the first sale it's also easier for the rivals to utilize the market promotion done earlier. Waiting for a little longer can also mean that the mistakes of the first mover can be analysed and then change one's own technology accordingly. The company might loose something if it is not first on the market, but being first and finding out that there are no markets is expensive.

Avoiding strategic rigidity means thorough planning and analyses. The company should make extensive risk analyses and form scenarios of the future state of markets. This doesn't mean that the company should simultaneously develop several lines of products wondering what the markets might need, but creating flexibility, where it is possible to create. Questions to be answered are, e.g.: How to pause, when the market is not ready; what if the largest potential customer doesn't come to a decision; what if the second round of financing fails etc. One useful method from literature is the thorough use of SWOT analyses. Almost every company had conducted the analysis, but still the study indicated that it was done mainly on paper. No realistic plans were conducted with threats in mind. Strategic planning or at least strategic awareness is needed for born globals in order to succeed in turbulent high-tech markets.

Finally, avoiding breached financer relations means selecting the financer at the beginning. Partner selection is more than just looking for financial resources promised to the business by the investor. A good venture capital investment is more than just money; it is networks of potential customers, business players, and experts. It is enhancement of the company management with the experience and know-how of the financer. However, the results of the study indicate that large public investors didn't contribute much to the company governance and their roles in the boards were mainly that of an observer. The entrepreneurs themselves felt that government officials were only monitoring the taxpayer's money. On the contrary, some private investors[35] actively participated in the company governance. Problems were initially only a commitment of individual preventatives of venture capital organizations, which rotated from company to company. This meant that advancement in the learning curve of the board was inefficient. But when the market went sour, creative atmosphere was suffocated. Nearly all the operations were driven down, because the investor felt that it was loosing more. The survival struggle of a single born global was less than it was to a larger partner. The same goes for the large mother companies that digested the know-how of the born globals and then didn't reach optimistic goals and bankrupted themselves. The study indicates that these mistakes could have been avoided by selecting the right financers. Better timing could also have been helpful, but that was a given factor for all. Rushing after a financer deal seems not to be useful after all.

Changing direction when already in the bankruptcy group seems to be difficult. Dynamics of cumulating strategic errors seem to inevitably lead to severe problems. However, the study found some indications that the path could be reversed before a fatal deathblow occurs. This is discussed in the next three paragraphs.

Changing the path in a product failure process starts by sharpening the product focus. That might be done by a process redesign. Enhancement of internal communication efficiency is the answer in implementing a new way of serving the business mission. Making the product (or the product line) less complex speeds up the R&D. Moreover, the study found evidence that a more structured and perhaps an even more hierarchical structure is needed for shortening the R&D phase. Efficient communication and processes inside are easier to sell and thus the commercialization is easier. They all have a positive impact on the depth of death valley and finding customers; therefore, the payback period is shorter. By this type of process redesign, a product failure path can be

[35] This is based on the interpretation of the entrepreneurs. The study tries to filter the emotional bursts of frustrated individuals.

avoided. This group seems to be the easiest to redirect, while the process of failure is the longest.

Changing direction in a market failure path is more difficult than in a product failure. This process redirection starts by changing the mindset of the board. Customer orientation seemed to be more a phrase in mission statements than true practise in company policies. Technology orientations blinded some entrepreneurs so that market conditions, future, present and passed were overlooked. When the customer orientation is planted into management, they might be able to see whether the customers are willing to buy the product in the first place. Understanding customers might give solutions to overcome not-invented-here problem, while simple market observance gives a hint when the technological development is leaving the technology of the company obsolete. The study indicates that the first movers curse is a serious obstacle for young high-tech companies. The threat, that customers don't understand the benefits of the new product, leads easily to no customers at all. The interviews indicated that it might be wise to wait a little longer before launching a revolutionary technology in the markets. Radical innovations are rare and competitors easily find a way to pass the patent protection. Scepticism about technological superiority is healthy. This all indicates that it is not the best technology that wins, but the best sold technology.

The most difficult path to get away from is a partner failure. For many entrepreneurs this was seen as impossible. The power of any investor at a given time was so large that a change of direction was difficult. The solution for minimizing the threat of breached financer relations at the end of the path is to divide the weight of each critical component. More than one large customer and more than one venture capitalist are an insurance in case of problems. A merger with a bigger company might be a solution for growth and prosperity, but this needs to be carefully considered. After a merger independent strategic decisions are non-existent and direction of the path cannot be reversed. A failure through a partner failure path seems to be unnecessary in the business perspective, but hardly avoidable.

Lastly in this chapter the study will discuss implementations of findings to POM$ICA strategy. This is done by referring first to Luostarinen's (1979) and Luostarinen & Gabrielsson's (2004) research of born global strategies and then suggesting concrete revisions to those findings. Even though the study doesn't have equal depth to his research, the scope of the study might reveal some useful aspects for future research.

The product strategy of born globals usually starts from more complex products such as services, high know-how or systems. Development through traditional product types is fast and might even leap over some stages. Mainly it this complexity of product, i.e. systems and high know-how, that proves to be a challenge for many born globals. The productization of a business idea should be more thoroughly done and simplified for all parties. This doesn't mean that the company should always start from the simple goods to internationalization process, but rather simplifying the concept for the decision-makers and sales personnel. A niche market is something to aim for and a clear focus is a necessity.

The operations strategy of born globals is more challenging than traditional SME's, while they might not follow traditional NIMOS-DIMOS-NIPOS-DIPOS order in internationalization. This way of internationalizing operations is useful in a rapid penetration in foreign markets. Even though not one case company faced severe problems in its internationalization of operations, it is evident that rushing into markets doesn't pay. Slower pace and non-investment operations are recommended to give flexibility for company strategy.

Born globals tend to go straight to lead markets in terms of market potential. This tendency was clearly present in the sample group of born globals even if the main markets at the moment were primary domestic. The entry into foreign markets wasn't problematic, but the lack of a centre of attention in the market selection caused an increase in costs. However, the targeting to lead markets is beneficial; the results of the study indicate that one market at a time would be more suitable for a company with limited resources.

The pricing strategy of born globals is usually value-based and the first products were sold for a lower price than even the costs would have implied. This was done in order to get the first reference customer. Pricing strategies were also similar in the group of bankrupted born globals. More problematic was the overall perception of the product. Price is one component of the whole visible product, but when in system and know-how the products themselves are incoherent the pricing them is difficult. This also corrodes the credibility of a small company. Ad-hoc pricing is not recommended. Moreover, the earning logic has to be thought carefully even before approaching the first customer. Exotic revenue sharing models usually only benefit a larger customer.

The intermediate strategy of born globals is usually a multiple channel strategy. This, however, was not the case in the bankrupted companies. They were usually bond to one large intermediate and in spite of their efforts to establish more channels they didn't succeed in this. The multiple channel strategy would give needed flexibility in company strategies and make them less dependent on a single large channel. In this case group, telecom operators were the most difficult intermediates for the firms. They used unscrupulous tactics in their negotiations and used their leading market power to dictate the rules for market penetration. It will be hard for a company trying to reach mobile phone users as long as national telecom operators rule the markets and they should develop their strategies accordingly.

As a customer strategy born globals differ from SMEs by reaching directly to lead customers. Many of the born globals in the sample group targeted the largest customers early, from the beginning. Many failed in trying. Large customers would be beneficial as references for future deals, but approaching them is difficult. There are many steps to reach before the first real decision maker and the interviews indicated that it might not be the highest-ranking officer in the company. Hurdles were common, such as not-invented-here and even "if it so great, why ain't you rich". Understanding the buying behaviour of customer companies is the means for success.

A typical born global advertising strategy relies on the company brand or on the product brand before SMEs. Most of the companies bankrupted didn't start by creating a brand.

Most of them were simply selling under intermediate brands. Face-to-face discussions with potential customers in fairs, at their offices or in different types of product demonstrations were used. These were usually quite inefficient and didn't seem to lead anywhere. On the contrary, the most effective market promotional medium was the discussion forums in the Internet. There, vast distances could be covered easily and product demonstrations were directed to people, who understood the technology. This cut costs greatly when the negotiation time was cut, right people were met and travel time removed. However, finding right discussion forum for push the product is as difficult as finding the right person in the company to close the sales deal, if not harder. Efficient market promotion comes from a clear product focus and simple packages. A requirement for effective external communication is efficient internal communication. The sales personnel have to know what the production is capable of and, vice versa, the production side has to know what promises are made to customers and what the customers want. Dedicated, motivated and customer-oriented sales personnel are the key to success.

7.3 Limitations

The research of the study indicates that strategy improvements can be done in small companies so as to increase their possibilities to succeed. However, implementations of the results are limited by five factors of the scope of the study. These limitations are 1) regional, 2) industrial, 3) company genre specific[36], 4) chronological, and 5) perspective. These aspects are discussed in the paragraphs below.

Firstly, the companies studied are all based in Finland. As discussed earlier in the literature review chapter, Finland is a typical SMOPEC (small and open economy). Companies in these types of countries tend to have both heavy push and pull forces towards internationalization. The regional limitation A therefore is that results might not be implementable in other type of economies. The regional limitation B is that types of companies surveyed in the study might not have risen in all the SMOPECs. Finland is said to be one of the most technologically driven societies in the world, so the entrepreneurial mindset might differ from one SMOPEC to another SMOPEC.

[36] Born global

Secondly, according to the scope of the study, there were high technology, high service, high know-how and high system companies. As reviewed in literature, Rinkinen (2000) states that high in this context means simply an advanced or a developed state, which is especially complex or powerful by nature. The complexity of the products of these born globals had a strong influence in the strategic problems that the companies faced. The industry limitation A is that the results of the study might not be implementable in more conventional types of businesses. Moreover, high design born globals were left out from the scope of the study, while identification and analyses would have necessitated for the purpose. The industry limitation B argues that the results are not implementable for high design born globals.

Thirdly, it is evident from previous studies that born globals differ greatly from the more common SMEs. Those differences are seen in the mentality of born global entrepreneurs, which leads to different interpretations of markets and thus, strategy. Globalization from the start means high growth demands in every aspect of business, which increases the need of resources and therefore a higher risk. Implementation of the results of the study is consequently limited by the genre of the born globals.

Fourthly, the time of the bankruptcies is a great external factor affecting the failures. The rise of the hype generated a false sense of optimism in both sides of the venture capitalist's table. This yielded to the birth of many companies, which otherwise wouldn't have started at all. The picture of high gains in high tech and high know-how businesses would also have clearly impacted entrepreneur's willingness to take risks. Venture capitalists also urged companies to seek the highest possible growth in spite of rebound on the short-term profitability. After the burst of bubble money once more became a scarce resource and additional rounds of financing failed for most of these companies. These bankruptcies differ, therefore, from bankruptcies in the depression of the 90s. Informal discussions with venture capitalists also indicate that this phenomenon is not going to occur in the next bankruptcy wave; at least not in these industries[37]. The last limitation to implementation of the results of the study is time. These results might not be suited for explaining neither future bankruptcies nor bankruptcies before the time scope.

Lastly, the group of interviewees consisted mainly of entrepreneurs. This perspective gives a much more accurate view on the initial business idea, however, it is an inside view. These results can be different if taking, e.g. a portfolio manager's perspective. Therefore the results are not implementable directly to other than entprepeneurial perspective.

7.4 Reliability and Validity of the Research

This part deals with the issue of challenges in the methodology chosen. The concept of reliability in the study conducted can be read from the style of referring to literature, interviews and other sources. Both quality and quantity of sources play a role in a reliability analysis. The concept validity in the study can be seen in the initial research problem setting, forming of research questions, methodology selection and in the recommendations from the research. In the following paragraphs these issues regarding this study are discussed.

Validity analysis raises a factor of confusions in the terminology used in the interviews. Even though professional jargon[38] was consciously avoided, misunderstandings were common. This led to longer explanations of questions and made the situation more directive than initially intended. For instance, entrepreneurs from non-business educational backgrounds found definitions of customers and intermediates difficult. Another term, which caused an unsuspected reaction, was "born global" itself. Some perceived that as label of the hype companies and insisted that their company had nothing to do with the "born global phenomenon" even though other sources confirmed

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[37] Hypes have been a repeating phenomenon since the modern type of stock markets. Therefore one could be quite certain that there will be another one in the future, but in which new promising industry and when is a matter of pure speculation.

[38] i.e. terminology of management consultants

this. This confusion was overcome by translating the term in Finnish. This had less "hype" in the clang. In spite of the confusions this doesn't seriously affect the validity of the study.

The second issue in validity analyses is the non-academic literature survey. In other words, the media analyses could not be affected by the journalistic way of reporting, i.e. telling stories that are easily readable and interesting. This might hide some crucial evidence of the bankruptcies. Interviews conducted by the press before bankruptcies are also affected by the business secrecies of the operating management. However, the press analysis was conducted with a critical eye and it was only a secondary source of information. Therefore its impact to validity of the research is considered to be small.

Finding the right people to answer the questions was a challenging task. Gathering of the contact information from the bankrupted companies proved to be almost impossible due to changing phone numbers. All the former managers already had new jobs and reaching them based on their names was a complex task and both good luck and determination was needed in order to be successful. When finally reaching the person, many were careful and doubted their knowledge in contributing to the interviews and thus rejected the interview for this reason. Two rejected when born globals were mentioned (terminology confusions lo above). The third reason for interview rejections was purely scheduling. This was by far the most common reason for rejection. Almost all perceived a two-hour interview as too long for remembering the past. These problems resulted in rather small number of interviews (eleven entrepreneurs). Even so the quality of interviews was sufficient. Therefore the number of the interviews doesn't severely affect the reliability of the study.

The next two issues affecting the reliability of the research are simple. First, bankruptcies had happened some time ago and people had forgotten some issues that concerned their strategy. This came up most clearly when discussing the SWOT-analyses of the company. Interviewees remembered the strengths and opportunities quite accurately, but negative issues such as weaknesses and threats seemed to be disregarded. However, this only underlines the problems in the strategic planning and therefore doesn't affect greatly the reliability of this study. Secondly, an issue that might have had an impact in the interviews is the alleged ex-post rationalization. This academic expression means that the interviews try to rationalize past events afterwards, when they interviewees don't accurately remember what happened. Some elements of this were existent in the interviews. For instance, some claimed that booming hype made their finance strategies more cautious. This seems to be clear evidence of ex-post rationalization, while even most of the experts didn't predict a crash. In spite of these difficulties, the reliability of the results of the study is not significantly challenged by the phenomenon of ex-post rationalization.

Then issue that might affect the reliability of this study is the initial company survey. The investigation of companies at National Board of Patents and Registration of Finland keeps records of all companies larger than micro ones. However, just basing the survey on a single Y-number makes the analyses difficult. If a company has merged or acquired with another then the follow-up backwards is difficult. Therefore in the case of Reach-U the study had initially a wrong perception of the first board that established the company. Some information, even though required by law, was also missing from the registers. This is caused by, to mention a few reasons, a willingness to report the changes and changing responsibilities of the key players in companies. Despite the difficulties these problems don't affect the reliability of the study.

Last issue concerning the reliability interview method of the study is the overwhelming feeling of the interviewees that external factors failed them. As noted before, this does not explain the strategies in these companies. However, this seemed to distract the interviewees from the essential. Metaphorically, it is true that during the boom when the water is high the rocks are easier to avoid. This doesn't explain the initial route selection of the company, which was in the scope of the study. This still doesn't have a large impact on either the reliability or the validity of the study.

7.5 Suggestions for the Future Research

As always, the research raised new questions. These can be perceived as a continuance of the problematic issue of bankruptcy companies. The study lined the most common reasons for the bankruptcies of born globals and identified three differently behaving groups of bankrupting born globals as well. These results are academically appropriate, but leave many challenges unsolved for entrepreneurs. The implementation of the results scrapped the surface of the issue, but this needs much deeper research to be fully useful for born globals. Below are a few major issues in this.

The study was able to identify the fatal five reasons to bankruptcies. However, the need for a more thorough strategy component analysis is needed. Mainly the issue is how the strategies and their components differ between successful and less successful born globals. Therefore a study of "Strategy comparison of successful and less successful born globals" is in order. This might reveal which reasons are the most crucial in born global strategies. This might also reveal success strategies for the new establishment of born global companies. The study should be based on an interview methodology, similar to this study, and similar types of companies. For instance, a fruitful industry would be high know-how companies, while many of them went bankrupt, but many also succeeded. The volatility of the high know-how market also puts a lot of weight on the risk analyses and thus, strategic planning. In addition to industry selection, the research should take time span into account. As explained in the previous section (reliability and validity of the study), high tide companies have different challenges than low tide companies. A static approach is still not deep enough, but the research should cover the tide change and adaptation of the companies to that change. These results would benefit both strategy researchers globally as well entrepreneurs.

The study was able to identify three categories of failing born globals. These categories were suitable for born globals of the time of bubble burst, but how is the dynamics of a strategic bankruptcy process present in other types of companies or other industries? Therefore a topic for future research could be "Dynamics of the strategies in failing (e.g.) high design companies". This would contribute to academic research by deepening the understanding of strategic failure processes. The scope of this study didn't allow deeper analyses of individual branches and it focused on born globals only. Now that the categories of bankruptcy companies are broadly covered in the born global genre, the challenge is to deepen the analyses. For instance, the actual timing of strategic decisions and direction are still unseen. These results would be a useful complementation to the category analyses of failing companies.

The study discussed the paths that born globals failed. The implementations of the results were partly giving guidelines for the turnaround strategies, but these were not covered in depth. The study of "Turnaround strategies of looming (e.g.) product failure" would be on the spot. The study should be able to identify companies that have been on the edge of a failure process and still managed to turn the tables in their favour. The most problematic issue in this research is the identification of troubled born globals. The press might give indications of the possible case companies and large financers could also possibly be interested in supporting the research by helping with the cases. After identification, next hardest thing is to monitor the companies. The escape from the assumed path takes some time and the results of strategic decisions are evident only after a while. This makes the study slower to conduct. In spite of the difficulties, this could be a true success story analysis, which would benefit both the academic and business worlds.

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8.3 Interviews

Person	Position in Company	Company	Date of the interview
Pekka Palin	Board member	Wapit	10.2.2004
Mika Järvinen	CEO	360.COM	22.3.2004
Janne Niemensivu	Board member	Apc Attoparsek	25.2.2004
Erkki Toljamo	Chairman	Grenwill	29.4.2004
Annamari Lättilä	CEO Chairman	NetBeacon (Reach-U Solutions)	3.3.2004
Kimmo Pennanen	Board member	NetBeacon (Reach-U Solutions)	4.3.2004
Kare Hellen	Board member	Riot Entertainment	11.3.2004
Reijo Luostarinen	Chairman	Taika Technologies	7.2.2004
Jari Yli-Hietanen	CEO	Audicode (V3)	5.3.2004
Esko Tikka	Board member	Vista Communications	18.2.2004
Harry Santamäki	Board member	Vista Communications	8.3.2004

A. Appendix: List of Interview Questions

		In English	In Finnish
General information	Statistics	Did the company have a global vision[39]? Did the company generate revenues outside Europe, and if so, relatively how much? How much did the company employ at its best? In which countries had the company made direct investments? In which countries had the company made indirect contacts, e.g. distribution agreements, agents etc? What was the structure of the organization?	Oliko yrityksellä globaali visio? Keräsikö yritys tuottoa Euroopan ulkopuolelta, ja jos niin kuinka suuri oli sen suhteellinen osuus? Kuinka paljon yritys työllisti parhaimmillaan? Mihin maihin yritys oli tehnyt suoria sijoituksia? Mihin maihin yritys oli tehnyt epäsuoria sijoituksia so. agentuuri- tai jakelusopimuksia? Mikä oli yrityksen organisaation rakenne?
Failure of revenues	Product	What was the main product of the company? Were there any difficulties with the product? Was the product better than that of rivals? How did it meet the customer needs according to the customers? Were product related problems one of the main factors in the bankruptcy of the company?	Mikä oli yrityksen päätuote? Oliko tuotteen kanssa mitään ongelmia? Oliko tuote kilpailijoitaan parempi? Kuinka se sopi asiakkaiden mukaan heidän tarpeisiinsa? Olivatko tuotteeseen liittyvät seikat konkurssin tärkeimpiä syitä?
	Operations	What was or was to be the international operations mode of the company? Did the company follow the traditional internationalisation pattern? If the company had established a network of business operations what kind of difficulties did you encounter, if any? Were the operation mode-related problems one of main factors in the bankruptcy of the company?	Mikä oli tai minkä tuli olla kansainvälisen liiketoiminnan muoto? Seurasiko yritys perinteistä kansainvälistämispolkua? Minkälaisia ongelmia tämä kansainvälisen liiketoiminnan muoto aiheutti? Olivatko kansainväliseen liiketoimintaan liittyvät seikat konkurssin tärkeimpiä syitä?
	Markets	What were the main markets of the company or were planned to be? What market choice-related problems did the company encounter? Were the market related problems one of the main factors in the bankruptcy of the company?	Mitkä olivat yrityksen suurimmat markkinat tai suurimmat suunnitellut markkinat? Mitä markkinavalintaan liittyviä ongelmia yritys kohtasi? Olivatko markkinaan/-noihin liittyvät ongelmat konkurssin tärkeimpiä syitä?

[39] By vision the study means a future goal of the company, i.e. where it wants to be. So a global vision in this context means: the company management aims to truly global markets in the near (less than 10 years) future.

	($)Price	What was the pricing strategy of the company? What was the earning logic of the company? What were the most common paying terms for customers in the company policy? What kind of problems did the company encounter in the conduction of the pricing strategy? Were pricing or earning logic related problems one of the main factors of the bankruptcy of the company?	Mikä oli yrityksen hintastrategia? Mikä oli yrityksen ansaintalogiikka? Minkälaiset maksuehdot yritys antoi tyypillisesti asiakkailleen? Minkälaisia ongelmia yritys kohtasi hinnoittelu strategian toimeenpanossa? Olivatko hintastrategia tai ansaintalogiikan ongelmat konkurssin tärkeimpiä syitä?
	Intermediates	Did the company use intermediates to reach end-users of the products of the company? How many layers of intermediates did the company have in distributing its products? What kind of problems did the company encounter with relations to intermediates? What was the perceived bargain power of the intermediates from the company perspective? Were the intermediate related problems one of the main factors in the bankruptcy of the company?	Käyttikö yritys välittäjiä tuotteen saamisessa loppukäyttäjälle? Kuinka monta tasoa oli jakeluketjussa? Minkälaisia ongelmia yritys kohtasi välittäjien kanssa. Mikä oli välittäjien neuvotteluvoima yrityksen kannalta katsottuna? Olivatko välittäjiin liittyvät ongelmat konkurssin tärkeimpiä syitä?
	Customers	Was the company on business-to-business markets or business-to-customers markets? Was the company depended on only a few large customers? What was the bargain power of the customers from the company perspective? What kind of problems did the company encounter with the customers? Were the customer related problems one of main factors in bankruptcy of the company?	Oliko yritys liike-elämältä liike-elämälle markkinoilla vai liike-elämältä loppukäyttäjille markkinoilla? Oliko yritys riippuvainen vain muutamasta suuresta asiakkaasta? Minkälainen oli asiakkaiden neuvotteluvoima yrityksen näkökulmasta? Minkälaisia asiakkaisiin liittyviä ongelmia yritys kohtasi? Olivatko asiakkaisiin liittyvät ongelmat konkurssin tärkeimpiä syitä?
	Advertising	What kind of marketing promotional means did the company use? What was the main message in market promotion? Which was the main target segment of the market promotion? Did the message reach the segment? Were there problems in international branding and did that have anything to do with the bankruptcy? Were the marketing communications related problems one of the main factors of the bankruptcy of the company?	Minkälaisia markkinointiviestinnän välineitä yritys käytti? Mikä oli tärkein viesti markkinointiviestinnässä? Mikä oli markkinointiviestinnän tärkein kohde segmentti? Tavoittiko viesti segmentin? Oliko kansainvälisen brändin luomisessa ongelmia ja oliko niillä yhteyttä konkurssiin? Olivatko markkinointiviestintään liittyvät ongelmat tärkeimpiä syitä konkurssiin?

Escalating costs	Cost of Growth	How much did the personnel of the company grow during the years of the existence? How much did the production capacity grow during the years of the existence? How much did the bottom line of the company grow during the years of the existence? Were the too rapid growth and its front weighted costs one of main factors in bankruptcy of the company?	Kuinka paljon henkilöstö kasvoi yrityksen olemassa olon aikana? Kuinka paljon tuotantokapasiteetti kasvoi yrityksen olemassa olon aikana? Kuinka paljon taseen loppusumma kasvoi yrityksen olemassa olon aikana? Oliko liian nopea kasvu ja sen tuottamat etupainoiset kustannukset konkurssin tärkeimpiä syitä?
	Cost of Internationalisation	How large were the foreign direct investments of the company? How many persons of the personnel worked abroad? Did the travel expenses have a significant role in the profitability of the company? Were the too rapid internationalisation and its front weighted costs one of main factors in the bankruptcy of the company?	Kuinka suuria olivat suorat sijoitukset ulkomaille? Kuinka suuri osa henkilöstöstä työskenteli ulkomailla? Oliko matkakuluilla suuri merkitys yrityksen kannattavuuteen? Oliko liian nopea kansainvälistyminen ja sen tuottamat etupainoiset kustannukset konkurssin tärkeimpiä syitä?
	R&D	What was the stage of product development when the company bankrupted? How large a share did the R&D have in the profit and loss account? What were the hindering factors of product commercialisation? Were the delayed R&D and its front weighted costs one of main factors in the bankruptcy of the company?	Missä vaiheessa yrityksen tuotteen kehitys oli kun yritys meni konkurssiin? Kuinka suuri rooli tutkimus- ja kehitysmenoilla oli tuloslaskelmassa? Mitkä oli tuotteen kaupallistamista hidastaneet seikat? Olivatko myöhästynyt tutkimus- ja kehitys ja sen etupainoiset kustannukset konkurssin tärkeimpiä syitä?
	Extraordinary administrative costs	How significant a role did the management wages pay in the company? Were there inadequate products or services acquired that had no effect in everyday work and7or business? Were the extraordinary administrative costs so significant that those could explain one of the main factors of the bankruptcy of the company?	Kuinka merkittäviä olivat johtoryhmän palkat yritykselle? Ostiko yritys tuotteita ja palveluita joille ei voitu osoittaa merkitystä joka päiväseen työhön ja/tai liiketoimintaan? Olivatko ylimääräiset hallinta kulut konkurssin tärkeimpiä syitä?
Management	SWOTs of the company	What were the strengths, weaknesses, opportunities and threats perceived by the company before the bankruptcy? What were the actual strengths, weaknesses, opportunities and threats at the time of the bankruptcy? Were the mistakes made in these the most important factor in the bankruptcy?	Mitkä olivat yrityksen vahvuudet, heikkoudet, mahdollisuudet ja uhat ennen konkurssia yrityksen näkökulmasta? Mitkä olivat yrityksen todelliset vahvuudet, heikkoudet, mahdollisuudet ja uhat konkurssin hetkellä? Olivatko arvioinneissa tapahtuneet virheet konkurssin tärkeimpiä syitä?

	Accounting practices of the company	Was the accounting function an internal part of the company or was it externalized? Did the company have constructive relations to the auditor? Did the company have good relations to the bookkeeping agency? Was the bankruptcy declared because of a cash crisis or because lack of equity? Were the accounting practices one of the main factors in the bankruptcy?	Oliko kirjanpito yrityksen sisäinen toiminto vai oliko se ulkoistettu? Oliko yrityksellä hyvä keskustelusuhde tilintarkastajan kanssa? Oliko yrityksellä hyvä keskustelusuhde tilitoimiston kanssa? Oliko konkurssi seurausta kassakriisistä vai pääomien riittämättömyydestä? Olivatko virheet laskentatoiminnossa konkurssin tärkeimpiä syitä?
	Personnel relations	What was the organisational structure of the company? Was there communication between the different functions? What were the difficulties encountered in personnel relations? Was the lack of communication or personal relations one of main factors in the bankruptcy?	Mikä oli yrityksen organisaation rakenne? Oliko eri toimintovälillä toimiva kommunikaatio? Mitä ongelmia oli kommunikaatiossa eri toimintojen välillä? Oliko kommunikaation tai henkilökohtaisten suhteiden puute konkurssin tärkeimpiä syitä?
	Financers	What were the main sources of finance of the company? What were the financing products used in the company? What were the relations between the company and financers? Did the financers actively participate in business development? What were the difficulties encountered in relations to financers? Was the first round of financing large enough at the time when it was gathered? Were the relations to financers one of the main factors in the bankruptcy of the company?	Mitkä olivat yrityksen tärkeimmät rahoituksen lähteet? Minkälaisia rahoitusvälineitä yritys käytti? Minkälaiset suhteet yrityksellä oli rahoittajiinsa? Oliko rahoittajilla aktiivinen rooli yrityksen kehittämisessä? Minkälaisia vaikeuksia yritys kohtasi rahoittajien kanssa? Oliko ensimmäisen rahoituskierroksen tuotto riittävän suuri sillä hetkellä kun se kerättiin? Olivatko suhteet sijoittajiin konkurssin tärkeimpiä syitä?
	Management team experience	How long had the board of directors been in the industry? What kinds of educations were present in the board of directors? Was the inexperience of the management one of the main factors in the bankruptcy?	Kuinka pitkä kokemus oli hallituksella toimialasta? Minkälaiset koulutustaustat olivat hallituksen jäsenillä? Oliko hallituksen kokemattomuus konkurssin tärkeimpiä syitä?
Other	Insides	How could the company have made it trough crisis? Would the company have been established after May 2000? Would the entrepreneurs have founded the company if they had the knowledge of today? What have the entrepreneurs themselves learnt from the experience? If they have to say the most important factor in the bankruptcy, what would that be?	Miten olisi yritys voinut selvitä kriisistä? Olisiko yritystä voitu perustaa toukokuun 2000 jälkeen? Olisivatko yrittäjät perustaneet yritystään, jos olisivat tienneet, mitä nyt tietävät? Mitä yrittäjät ovat oppineet konkurssistaan? Mikä on konkurssin kaikkein tärkein syy yrittäjien näkökulmasta?